Permit to Operate

EXPIRATION DATE $02/28/200^{\circ}$ FACILITY: S-1129

LEGAL OWNER OR OPERATOR: CHEVRON U.S.A.INC.

MAILING ADDRESS: P O BOX 1392

BAKERSFIELD, CA 93302

FACILITY LOCATION: HEAVY OIL WESTERN

, CA

FACILITY DESCRIPTION: OIL AND NATURAL GAS PRODUCTION

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

The Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

DAVID L. CROW

Director of Permit Services

Seyed Sadredin

Executive Director / APCO

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-0-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

- 1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)], [Federally Enforceable Through Title V]
- 2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)], [Federally Enforceable Through Title V]
- 3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0], [Federally Enforceable Through Title V]
- 4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020. [District Rule 2010, 3.0 and 4.0; and 2020], [Federally Enforceable Through Title V]
- 5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1], [Federally Enforceable Through Title V]
- 6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031], [Federally Enforceable Through Title V]
- 7. Every application for a permit required under Rule 2010 (12/17/92) (Permits Required) shall be filed in a manner and form prescribed by the District. [District Rule 2040], [Federally Enforceable Through Title V]
- 8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1], [Federally Enforceable Through Title V]
- 9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.6.1], [Federally Enforceable Through Title V]
- 11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520(6/15/95) [District Rules 2520, 9.6.2 and 1100, 7.0], [Federally Enforceable Through Title V]

- 12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit . [District Rule 2520, 9.8], [Federally Enforceable Through Title V]
- 13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.9.2], [Federally Enforceable Through Title V]
- 14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.9.3], [Federally Enforceable Through Title V]
- 15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.9.4], [Federally Enforceable Through Title V]
- 16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.9.5], [Federally Enforceable Through Title V]
- 17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.10], [Federally Enforceable Through Title V]
- 18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.14.2.1], [Federally Enforceable Through Title V]
- 19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.14.2.2], [Federally Enforceable Through Title V]
- 20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.14.2.3], [Federally Enforceable Through Title V]
- 21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.14.2.4], [Federally Enforceable Through Title V]
- 22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (12/17/92), by using EPA method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)], [Federally Enforceable Through Title V]
- 23. No person shall supply, sell, solicit or apply any architectural coating, except specialty coatings, that contains more than 250 grams of VOC per liter of coating (less water and exempt compounds, and excluding any colorant added to tint bases), or manufacture, blend, or repackage such coating with more than 250 grams of VOC per liter (less water and exempt compounds, and excluding any colorant added to tint bases) for use within the District. [District Rule 4601, 5.1], [Federally Enforceable Through Title V]
- 24. Specialty Coating Limitations: No person shall apply, sell, solicit, or offer for sale any architectural coating listed in the Tables of Standards (District Rule 4601, Table 1 and Table 2), nor manufacture, blend, or repackage such coating for use within the District, which contains VOCs in excess of the specified limits after the corresponding date listed in Table 1(grams of VOC per liter of coating as applied less water and exempt compounds, excluding any colorant added to tint bases) and in Table 2 (grams of VOC per liter of material), except as provided in Section 5.3 of Rule 4601. [District Rule 4601, 5.2], [Federally Enforceable Through Title V]
- 25. All VOC-containing materials shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, maintained or repaired. [District Rule 4601, 5.4], [Federally Enforceable Through Title V]
- 26. A person shall not use VOCs for the cleanup of spray equipment unless equipment for collection of the cleaning compounds and minimizing its evaporation to the atmosphere is used. [District Rule 4601, 5.5], [Federally Enforceable Through Title V]
- 27. The permittee shall comply with all the Labeling and Test Method requirements outlined in Rule 4601 sections 6.1 and 6.2 (9/17/97). [District Rule 4601, 6.1 and 6.2], [Federally Enforceable Through Title V]
- 28. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.14.1 and 10.0], [Federally Enforceable Through Title V]

- 29. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F], [Federally Enforceable Through Title V]
- 30. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart F. [40 CFR Part 82, Subpart F], [Federally Enforceable Through Title V]
- 31. Disturbances of soil related to any construction, demolition, excavation, extraction, and other earthmoving activities shall comply with the requirements for fugitive dust control in Rule 8021 (11/15/01) unless specifically exempted under section 4.0 of Rule 8021. [District Rule 8021], [Federally Enforceable Through Title V]
- 32. Outdoor handling, storage, and transport of any bulk material shall comply with the requirements of Rule 8031 (11/15/01), unless specifically exempted under section 4.0 of Rule 8031. [District Rule 8031], [Federally Enforceable Through Title V]
- 33. Any open area having 3.0 acres or more of disturbed surface area, that has remained undeveloped, unoccupied, unused or vacant for more than seven days shall comply with the requirements of Rule 8051 (11/15/01), unless specifically exempted under section 4.0 of Rule 8051. [District Rule 8051], [Federally Enforceable Through Title V]
- 34. Any new or existing public or private paved or unpaved road, road construction project, or road modification project shall implement the control measures and design criteria of, and comply with the requirements of Rule 8061 (11/15/01) unless specifically exempted under section 4.0 of Rule 8061. [District Rule 8061], [Federally Enforceable Through Title V]
- 35. Any unpaved vehicle/equipment traffic area of 1.0 acre or larger shall comply with the requirements of Rule 8071 (11/15/01), unless specifically exempted under section 4.0 of Rule 8071. [District Rule 8071], [Federally Enforceable Through Title V]
- 36. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M], [Federally Enforceable Through Title V]
- 37. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.17], [Federally Enforceable Through Title V]
- 38. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2], [Federally Enforceable Through Title V]
- 39. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permit shall apply. [District Rule 2520, 9.1.1], [Federally Enforceable Through Title V]
- 40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 41. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (12/17/92); 4601, sections 5.1, 5.2, 5.4, 5.5, 6.1, and 6.2 (9/17/97); 8020 (4/25/96); 8030 (4/25/96); 8060 (4/25/96); A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 43. All permits for facilities S-1129, S-1141, S-1549, and S-2592 are included in the Texaco, Inc. Heavy Oil Western stationary source. [District NSR Rule], [Federally Enforceable Through Title V]
- 44. When applicable to 40 CFR Part 68, a subject facility shall submit to the proper authority a Risk Management Plan when mandated by the regulation. [40 CFR Part 68], [Federally Enforceable Through Title V]
- 45. For vapor recovery systems connected to tanks with pressure relief valves, operator shall monitor vapor recovery compressor activation and shut off manometer pressures on quarterly basis to ensure that compressor activation pressure does not exceed pressure relief valve setting. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 46. For tanks equipped with pressure relief valves, operator shall inspect pressure relief valves for fugitive leaks annually in accordance with EPA Method 21, with the instrument calibrated with methane. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 47. On June 30, 2002, the initial Title V permit was issued, the reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days of the end of reporting period. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-1-4 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

27.5 MMBTU/HR GAS-FIRED STRUTHERS STEAM GENERATOR (HSG-1; DIS# 5702-66) WITH NORTH AMERICAN BURNER. (TAYLOR LEASE)

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% carbon dioxide). [District Rule 4301]
- 4. All combustion equipment equipment (burner, combustion air controls, etc.) shall be operated and maintained as intended by manufacturer. []
- All wells producing from strata steamed by this unit shall be connected to a District-approved emissions control system, have District-approved closed casing vents or be District-approved uncontrolled cyclic wells. [District Rule 4401]
- 6. This steam generator shall be fired exclusively on PUC-regulated natural gas or natural gas documented to be of comparable sulfur quality. []
- 7. When gas firing, compliance source testing for fuel gas sulfur content shall be conducted annually (or as approved by the District) within 60 days prior to the permit anniversary. [District Rule 1070]
- 8. The sample collection shall be conducted under conditions (fuel quality, firing rate, waste gas incineration, air fuel ratio, etc.) expected to result in emissions representative of normal operation. []
- 9. The operational conditions during compliance testing may be imposed as permit requirements. []
- 10. Should source testing indicate an emission factor higher than that approved, the operator shall comply with Rule 1100 and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District NSR Rule]
- 11. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District NSR Rule]
- 12. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule]
- 13. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District NSR Rule]
- 14. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District NSR Rule]
- 15. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District NSR Rule]
- 16. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District NSR Rule]
- 17. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District NSR Rule]
- 18. Sufficient reference gas shall be available for continuous calibration of oxygen analyzer. []
- 19. For the SLC, overall throttle and use factor for each unit shall be no greater than 64%. []
- 20. Maximum gas-fired emission rates shall not exceed PM10: 0.0100 lb/MMBtu; SOx (as SO2): 0.0007 lb/MMBtu; SOx (as SO4): 0.0004 lb/MMBtu; NOx (as NO2): 0.1080 lb/MMBtu; VOC: 0.0030 lb/MMBtu; and CO: 0.0350 lb/MMBtu. []
- 21. Total combined emissions for all units subject to SLC plan shall not exceed PM10: 1,448.23 lb/day; SOx (as SO2): 12,230.23 lb/day; SOx (as SO4): 504.57 lb/day; NOx (as NO2): 9,146.23 lb/day; VOC: 181.73 lb day; and CO: 1,073.16 lb/day. []

- 22. For units equipped with continuous emissions monitors (CEMs), CEM records shall be used in place of calculated emissions. [District NSR Rule]
- 23. If on any day CEM or fuel use determinations fail, Texaco EPI shall meet the requirements of Rule 1100 as specified for CEM's. []
- 24. For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas flowrates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-2-3 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

30.0 MMBTU/HR GAS-FIRED THERMOTICS STEAM GENERATOR (HSG# 4; DIS# 27117-77) WITH NORTH AMERICAN BURNER. (GOVERNMENT LEASE)

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% carbon dioxide). [District Rule 4301]
- 4. All combustion equipment equipment (burner, combustion air controls, etc.) shall be operated and maintained as intended by manufacturer. []
- All wells producing from strata steamed by this unit shall be connected to a District-approved emissions control system, have District-approved closed casing vents or be District-approved uncontrolled cyclic wells. [District Rule 4401]
- 6. When gas firing, compliance source testing for fuel gas sulfur content shall be conducted annually (or as approved by the District) within 60 days prior to the permit anniversary. [District Rule 1070]
- 7. The sample collection shall be conducted under conditions (fuel quality, firing rate, waste gas incineration, air fuel ratio, etc.) expected to result in emissions representative of normal operation. []
- 8. The operational conditions during compliance testing may be imposed as permit requirements. []
- 9. Should source testing indicate an emission factor higher than that approved, the operator shall comply with Rule 1100 and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District NSR Rule]
- 10. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District NSR Rule]
- 11. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule]
- 12. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District NSR Rule]
- 13. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District NSR Rule]
- 14. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District NSR Rule]
- 15. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District NSR Rule]
- 16. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District NSR Rule]
- 17. Sufficient reference gas shall be available for continuous calibration of oxygen analyzer. []
- 18. For the SLC, overall throttle and use factor for each unit shall be no greater than 64%. []
- 19. Maximum gas-fired emission rates shall not exceed PM10: 0.0010 lb/MMBtu; SOx (as SO2): 0.0010 lb/MMBtu; SOx (as SO4): 0.0003 lb/MMBtu; NOx (as NO2): 0.1080 lb/MMBtu; VOC: 0.0030 lb/MMBtu; and CO: 0.0350 lb/MMBtu. []
- 20. Total combined emissions for all units subject to SLC plan shall not exceed PM10: 4,169.5 lb/day; SOx (as SO2): 27,406.4 lb/day; SOx (as SO4): 2,119.3 lb/day; NOx (as NO2): 15,444.5 lb/day; VOC: 625.5 lb day; and CO: 3,170.4 lb/day. []

- 21. For units equipped with continuous emissions monitors (CEMs), CEM records shall be used in place of calculated emissions. [District NSR Rule]
- 22. If on any day CEM or fuel use determinations fail, Texaco EPI shall meet the requirements of Rule 1100 as specified for CEM's. []
- 23. For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas flowrates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-3-6 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

27.5 MMBTU/HR GAS-FIRED STRUTHERS STEAM GENERATOR (HSG# 5; DIS# 51040-66) WITH NORTH AMERICAN BURNER. (TAYLOR LEASE)

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% carbon dioxide). [District Rule 4301]
- 4. All combustion equipment equipment (burner, combustion air controls, etc.) shall be operated and maintained as intended by manufacturer. []
- All wells producing from strata steamed by this unit shall be connected to a District-approved emissions control system, have District-approved closed casing vents or be District-approved uncontrolled cyclic wells. [District Rule 4401]
- 6. When gas firing, compliance source testing for fuel gas sulfur content shall be conducted annually (or as approved by the District) within 60 days prior to the permit anniversary. [District Rule 1070]
- 7. The sample collection shall be conducted under conditions (fuel quality, firing rate, waste gas incineration, air fuel ratio, etc.) expected to result in emissions representative of normal operation. []
- 8. The operational conditions during compliance testing may be imposed as permit requirements. []
- 9. Should source testing indicate an emission factor higher than that approved, the operator shall comply with Rule 1100 and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District NSR Rule]
- 10. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District NSR Rule]
- 11. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule]
- 12. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District NSR Rule]
- 13. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District NSR Rule]
- 14. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District NSR Rule]
- 15. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District NSR Rule]
- 16. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District NSR Rule]
- 17. Sufficient reference gas shall be available for continuous calibration of oxygen analyzer. []
- 18. For the SLC, overall throttle and use factor for each unit shall be no greater than 64%. []
- 19. Maximum gas-fired emission rates shall not exceed PM10: 0.0100 lb/MMBtu; SOx (as SO2): 0.0007 lb/MMBtu; SOx (as SO4): 0.0004 lb/MMBtu; NOx (as NO2): 0.1080 lb/MMBtu; VOC: 0.0030 lb/MMBtu; and CO: 0.0350 lb/MMBtu. []
- 20. Total combined emissions for all units subject to SLC plan shall not exceed PM10: 1,448.23 lb/day; SOx (as SO2): 12,230.23 lb/day; SOx (as SO4): 504.57 lb/day; NOx (as NO2): 9,146.23 lb/day; VOC: 181.73 lb day; and CO: 1,073.16 lb/day. []

- 21. For units equipped with continuous emissions monitors (CEMs), CEM records shall be used in place of calculated emissions. [District NSR Rule]
- 22. If on any day CEM or fuel use determinations fail, Texaco EPI shall meet the requirements of Rule 1100 as specified for CEM's. []
- 23. For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas flowrates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-16-9 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

23.0 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED STRUTHERS STEAM GENERATOR (HSG #45; DIS# 21088-66) WITH O2 ANALYZER/CONTROLLER, NORTH AMERICAN BURNER, AND FLUE GAS RECIRCULATION - NORTH MIDWAY

- 1. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
- 2. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 5. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
- 6. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume until compliance with the sulfur limits can be demonstrated for 8 consecutive weeks for a fuel source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 7. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6, 6A, 6B, 6C or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 8. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 9. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2; 4305, 6.2.1; and 4351, 6.2.1], [Federally Enforceable Through Title V]
- 10. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and Kern County Rule 407], [Federally Enforceable Through Title V]

- 11. Sulfur compound emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 one-hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424; District Rules 2520, 9.3.2 and 4406], [Federally Enforceable Through Title V]
- 12. Emission rates shall not exceed PM10: 0.010 lb/MMBtu, SOx (as SO2): 2.124 lb/MMBtu nor 200 lb/hr, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, and CO: 48 ppmv @ 3% O2. [District Rules 4301, 4305, 4406 and NSR], [Federally Enforceable Through Title V]
- 13. Emissions assessed to the SLC for this unit are PM10: 3.5 lb/day, SOx (as SO2): 750.2 lb/day, NOx (as NO2): 12.7 lb/day, VOC: 1.1 lb/day, and CO: 12.4 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 14. Emission rates from all permit units in the Western Heavy Oil Source SLC Compliance Plan shall not exceed PM10: 289.5 lb/day, SOx (as SO2): 3,326.5 lb/day; NOx (as NO2): 302.0 lb/day, VOC: 33.8 lb/day, and CO: 175.9 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 15. The stack concentration of NOx (as NO2), CO, and O2 shall be measured at least on a monthly basis using District approved portable analyzers. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 16. The permittee shall maintain records of the date and time of NOx, CO, and O2 measurements, the measured NO2 and CO concentrations corrected to 3% O2, and the O2 concentration. The records shall also include a description of any corrective action taken to maintain the emissions in the acceptable range. These records shall be retained at the facility for a period of no less than five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 17. If the NOx or CO concentrations, as measured by the portable analyzer, exceed the permitted emission limits, the permittee or third party shall notify the District and return the NOx and CO concentrations to the permitted emission limits as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed the permitted emission limits after (1) hour, the permittee shall conduct a source test within 60 days, of the first exceedance to demonstrate compliance with the permitted emission limits. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 18. Should source testing indicate an emission factor higher than that approved, the operator shall comply with District Rule 1100, Kern County Rule 111, and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District NSR Rule], [Federally Enforceable Through Title V]
- 19. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District NSR Rule], [Federally Enforceable Through Title V]
- 20. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]
- 21. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District NSR Rule], [Federally Enforceable Through Title V]
- 22. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District NSR Rule], [Federally Enforceable Through Title V]
- 23. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District NSR Rule], [Federally Enforceable Through Title V]
- 24. For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas flow rates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. [District NSR Rule], [Federally Enforceable Through Title V]
- 25. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District NSR Rule], [Federally Enforceable Through Title V]
- 26. Source testing for NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 27. Source testing for NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]

- 28. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 29. The following conditions must be met for representative units to be used to test for NOx and CO emissions for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of heat input, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 30. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 31. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 32. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated such that in three years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 33. Should any of the representative units exceed the required emission limits of this permit, each of the unit in the group shall conduct emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.)

 [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 34. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081 and 4305], [Federally Enforceable Through Title V]
- 35. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. These means shall be multiplied by the appropriate factor to determine compliance with the emission limits. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 36. Stack gas velocities for source test purposes shall be determined using EPA Method 2. [District Rule 1081], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-20-7 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

27.5 MMBTU/HR NATURAL GAS FIRED C.E. NATCO STEAM GENERATOR (HSG #51; DIS# 19973-71) WITH O2 ANALYZER/CONTROLLER, NORTH AMERICAN BURNER, AND FLUE GAS RECIRCULATION - NORTH MIDWAY LEASE

- 1. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
- 2. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 5. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
- 6. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume until compliance with the sulfur limits can be demonstrated for 8 consecutive weeks for a fuel source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 7. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6, 6A, 6B, 6C or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 8. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 9. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2; 4305, 6.2.1; and 4351, 6.2.1], [Federally Enforceable Through Title V]
- 10. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and Kern County Rule 407], [Federally Enforceable Through Title V]

- 11. Sulfur compound emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 one-hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424; District Rules 2520, 9.3.2 and 4406], [Federally Enforceable Through Title V]
- 12. When this unit is not operated (dormant for Rule 4305) the fuel supply line shall be physically disconnected from this unit. [District Rule 2080]
- 13. Permittee shall notify the District at least seven (7) calendar days prior to recommencing operation. [District Rule 1070]
- 14. A source test to verify operation within the indicated emission limits shall be performed within 60 days of recommencing operation. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 15. Emission rates shall not exceed PM10: 0.010 lb/MMBtu, SOx (as SO2): 0.001 lb/MMBtu nor 200 lb/hr, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, and CO: 48 ppmv @ 3% O2. [District Rules 4301, 4305, 4406 and NSR], [Federally Enforceable Through Title V]
- 16. Emissions assessed to the SLC for this unit are PM10: 3.9 lb/day, SOx (as SO2): 0.4 lb/day, NOx (as NO2): 13.9 lb/day, VOC: 1.2 lb/day, and CO: 13.5 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 17. Emission rates from all permit units in the Western Heavy Oil Source SLC Compliance Plan shall not exceed PM10: 289.5 lb/day, SOx (as SO2): 3,326.5 lb/day; NOx (as NO2): 302.0 lb/day, VOC: 33.8 lb/day, and CO: 175.9 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 18. After recommencing operation, the stack concentration of NOx (as NO2), CO, and O2 shall be measured at least on a monthly basis using District approved portable analyzers. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 19. The permittee shall maintain records of the date and time of NOx, CO, and O2 measurements, the measured NO2 and CO concentrations corrected to 3% O2, and the O2 concentration. The records shall also include a description of any corrective action taken to maintain the emissions in the acceptable range. These records shall be retained at the facility for a period of no less than five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 20. If the NOx or CO concentrations, as measured by the portable analyzer, exceed the permitted emission limits, the permittee or third party shall notify the District and return the NOx and CO concentrations to the permitted emission limits as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed the permitted emission limits after (1) hour, the permittee shall conduct a source test within 60 days, of the first exceedance to demonstrate compliance with the permitted emission limits. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 21. Should source testing indicate an emission factor higher than that approved, the operator shall comply with District Rule 1100, Kern County Rule 111, and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District NSR Rule], [Federally Enforceable Through Title V]
- 22. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District NSR Rule], [Federally Enforceable Through Title V]
- 23. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]
- 24. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District NSR Rule], [Federally Enforceable Through Title V]
- 25. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District NSR Rule], [Federally Enforceable Through Title V]
- 26. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District NSR Rule], [Federally Enforceable Through Title V]
- 27. For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas flow rates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. [District NSR Rule], [Federally Enforceable Through Title V]
- 28. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District NSR Rule], [Federally Enforceable Through Title V]

- 29. After recommending operation, source testing for NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 30. After recommencing operation, source testing for NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 31. After recommencing operation, if permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 32. The following conditions must be met for representative units to be used to test for NOx and CO emissions for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of heat input, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 33. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 34. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 35. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated such that in three years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 36. Should any of the representative units exceed the required emission limits of this permit, each of the unit in the group shall conduct emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.)

 [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 37. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081 and 4305], [Federally Enforceable Through Title V]
- 38. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. These means shall be multiplied by the appropriate factor to determine compliance with the emission limits. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 39. Stack gas velocities for source test purposes shall be determined using EPA Method 2. [District Rule 1081], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-24-9 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

25.2 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS FIRED C.E. NATCO STEAM GENERATOR (HSG #60; DIS# 20754-66) WITH O2 ANALYZER/CONTROLLER, NORTH AMERICAN BURNER, AND FLUE GAS RECIRCULATION - DERBY ACRES LEASE

- 1. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
- 2. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 5. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
- 6. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume until compliance with the sulfur limits can be demonstrated for 8 consecutive weeks for a fuel source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 7. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6, 6A, 6B, 6C or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 8. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 9. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2; 4305, 6.2.1; and 4351, 6.2.1], [Federally Enforceable Through Title V]
- 10. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and Kern County Rule 407], [Federally Enforceable Through Title V]

- 11. Sulfur compound emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 one-hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424; District Rules 2520, 9.3.2 and 4406], [Federally Enforceable Through Title V]
- 12. Emission rates shall not exceed PM10: 0.010 lb/MMBtu, SOx (as SO2): 1.768 lb/MMBtu nor 200 lb/hr, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, and CO: 48 ppmv @ 3% O2. [District Rules 4301, 4305, 4406 and NSR], [Federally Enforceable Through Title V]
- 13. Emissions assessed to the SLC for this unit are PM10: 3.9 lb/day, SOx (as SO2): 684.3 lb/day, NOx (as NO2): 13.9 lb/day, VOC: 1.2 lb/day, and CO: 13.5 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 14. Emission rates from all permit units in the Western Heavy Oil Source SLC Compliance Plan shall not exceed PM10: 289.5 lb/day, SOx (as SO2): 3,326.5 lb/day; NOx (as NO2): 302.0 lb/day, VOC: 33.8 lb/day, and CO: 175.9 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 15. The stack concentration of NOx (as NO2), CO, and O2 shall be measured at least on a monthly basis using District approved portable analyzers. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 16. The permittee shall maintain records of the date and time of NOx, CO, and O2 measurements, the measured NO2 and CO concentrations corrected to 3% O2, and the O2 concentration. The records shall also include a description of any corrective action taken to maintain the emissions in the acceptable range. These records shall be retained at the facility for a period of no less than five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 17. If the NOx or CO concentrations, as measured by the portable analyzer, exceed the permitted emission limits, the permittee or third party shall notify the District and return the NOx and CO concentrations to the permitted emission limits as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed the permitted emission limits after (1) hour, the permittee shall conduct a source test within 60 days, of the first exceedance to demonstrate compliance with the permitted emission limits. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 18. Should source testing indicate an emission factor higher than that approved, the operator shall comply with District Rule 1100, Kern County Rule 111, and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District NSR Rule], [Federally Enforceable Through Title V]
- 19. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District NSR Rule], [Federally Enforceable Through Title V]
- 20. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]
- 21. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District NSR Rule], [Federally Enforceable Through Title V]
- 22. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District NSR Rule], [Federally Enforceable Through Title V]
- 23. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District NSR Rule], [Federally Enforceable Through Title V]
- 24. For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas flow rates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. [District NSR Rule], [Federally Enforceable Through Title V]
- 25. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District NSR Rule], [Federally Enforceable Through Title V]
- 26. Source testing for NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 27. Source testing for NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]

- 28. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 29. The following conditions must be met for representative units to be used to test for NOx and CO emissions for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of heat input, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 30. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 31. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 32. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated such that in three years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 33. Should any of the representative units exceed the required emission limits of this permit, each of the unit in the group shall conduct emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.)

 [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 34. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081 and 4305], [Federally Enforceable Through Title V]
- 35. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. These means shall be multiplied by the appropriate factor to determine compliance with the emission limits. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 36. Stack gas velocities for source test purposes shall be determined using EPA Method 2. [District Rule 1081], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-36-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

62.5 MMBTU/HR STRUTHERS GAS-FIRED STEAM GENERATOR #HSG-177 (DIS #20619-78). (DEL MONTE LEASE)

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% carbon dioxide). [District Rule 4301]
- 3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 4. Steam generator shall be fired exclusively on PUC regulated natural gas. []
- 5. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District NSR Rule]
- 6. All combustion equipment shall be maintained and operated in accordance with the manufacturer's specifications. []
- 7. All wells producing from strata steamed by this unit shall be connected to a District approved emissions control system, have District approved closed casing vents, or be District approved uncontrolled cyclic wells. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-37-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

62.5 MMBTU/HR STRUTHERS GAS-FIRED STEAM GENERATOR #HSG-178 (DIS #20655-79). (REWARD LEASE)

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% carbon dioxide). [District Rule 4301]
- 3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 4. Steam generator shall be fired exclusively on PUC regulated natural gas. []
- 5. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District NSR Rule]
- 6. All combustion equipment shall be maintained and operated in accordance with the manufacturer's specifications. []
- 7. All wells producing from strata steamed by this unit shall be connected to a District approved emissions control system, have District approved closed casing vents, or be District approved uncontrolled cyclic wells. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-41-9 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

62.5 MMBTU/HR GAS-FIRED STRUTHERS STEAM GENERATOR (HSG #182; DIS# 20617-80) WITH NORTH AMERICAN BURNER. (DEL MONTE LEASE)

- 1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% carbon dioxide). [District Rule 4301]
- 3. All combustion equipment (burner, combustion air controls, etc.) shall be operated and maintained as intended by manufacturer. [District Rule 2080]
- 4. All wells producing from strata steamed by this unit shall be connected to a District-approved emissions control system, have District-approved closed casing vents or be District-approved uncontrolled cyclic wells. [District Rule 4401]
- 5. When gas firing, compliance source testing for fuel gas sulfur content shall be conducted annually (or as approved by the District) within 60 days prior to the permit anniversary. [District Rule 1070]
- 6. The sample collection shall be conducted under conditions (fuel quality, firing rate, waste gas incineration, air fuel ratio, etc.) expected to result in emissions representative of normal operation. [District Rule 2080]
- 7. The operational conditions during compliance testing may be imposed as permit requirements. [District Rule 2080]
- 8. Should source testing indicate an emission factor higher than that approved, the operator shall comply with Rule 1100 and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District NSR Rule]
- 9. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District NSR Rule]
- 10. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule]
- 11. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District NSR Rule]
- 12. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District NSR Rule]
- 13. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District NSR Rule]
- 14. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District NSR Rule]
- 15. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District Rule 2080]
- 16. Sufficient reference gas shall be available for continuous calibration of oxygen analyzer. [District Rule 2080]
- 17. For the SLC, overall throttle and use factor for each unit shall be no greater than 64%. [District Rule 2201]
- 18. Maximum emission rates for permit unit shall not exceed PM10: 0.0100 lb/MMBtu; SOx (as SO2): 0.0011 lb/MMBtu; NOx (as NO2): 0.1080 lb MMBtu; VOC: 0.0030 lb/MMBtu; and CO: 0.0070 lb/MMBtu. [District Rule 2201]
- 19. Maximum daily emissions from all permit units in the Western Heavy Oil Source SLC Compliance Plan shall not exceed PM10: 595.24 lb/day; SOx (as SO2): 6248.41 lb/day; NOx (as NO2): 2431.17 lb/day; VOC: 63.17 lb/day; and CO: 306.49 lb/day. [District Rule 2201]
- 20. This permit unit shall comply with NOx emission requirements as specified in Rule 4405. [District Rule 4405]

- 21. This permit unit shall comply with Sulfur Compound emission requirements as specified in Rule 4406. [District Rule 4406]
- 22. For units equipped with continuous emissions monitors (CEMs), CEM records shall be used in place of calculated emissions. [District NSR Rule]
- 23. If on any day CEM or fuel use determinations fail, Texaco EPI shall meet the requirements of Rule 1100 as specified for CEM's. [District Rule 2201]
- 24. For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas flowrates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. [District Rule 2201]
- 25. The following test method shall be used: fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rule 1081]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-44-9 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

62.5 MMBTU/HR GAS-FIRED STRUTHERS STEAM GENERATOR (HSG #188; DIS# 20649-81) WITH NORTH AMERICAN BURNER (NORTH MIDWAY LEASE)

- 1. In accordance with the provisions of Rule 4305 Section 7.4, amended 12/19/96, this unit may only be operated after the permittee has submitted an application for Authority to Construct for any modification necessary to comply with Rule 4305. [District Rule 4305]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% carbon dioxide). [District Rule 4301]
- 4. All combustion equipment (burner, combustion air controls, etc.) shall be operated and maintained as intended by manufacturer. [District Rule 2080]
- 5. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District Rule 2080]
- 6. When gas firing, compliance source testing for fuel gas sulfur content shall be conducted annually (or as approved by the District) within 60 days prior to the permit anniversary. [District Rule 1070]
- 7. The sample collection shall be conducted under conditions (fuel quality, firing rate, waste gas incineration, air fuel ratio, etc.) expected to result in emissions representative of normal operation. [District Rule 1081]
- 8. The operational conditions during compliance testing may be imposed as permit requirements. [District Rule 2080]
- 9. Should source testing indicate an emission factor higher than that approved, the operator shall comply with Rule 1100 and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District NSR Rule]
- 10. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District NSR Rule]
- 11. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule]
- 12. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District NSR Rule]
- 13. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District NSR Rule]
- 14. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District NSR Rule]
- 15. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District NSR Rule]
- 16. Emissions assessed to the SLC for this unit are PM10: 9.6 lb/day, SOx (as SO2): 108.8 lb/day, NOx (as NO2): 54.0 lb/day, VOC: 2.9 lb/day, and CO: 6.7 lb/day [District Rule 2201]
- 17. Emission rates for permit unit shall not exceed PM10: 0.010 lb/MMBtu, SOx (as SO2): 0.113 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu, VOC: 0.003 lb/MMBtu, and CO: 0.007 lb/MMBtu. [District Rule 2201]
- 18. Emission rates from all permit units in the Western Heavy Oil Source SLC Compliance Plan shall not exceed PM10: 545.6 lb/day, SOx (as SO2): 6,237.6 lb/day, NOx (as NO2): 1,708.6 lb/day, VOC: 59.8 lb/day, and CO: 282.6 lb/day. [District Rule 2201]
- 19. This permit unit shall comply with NOx and sulfur compound emission requirements as specified in Rules 4405 and 4406. [District Rules 4405 and 4406]

flowrates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. [District Rule 2201]

20.

21.

For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas

The following test methods shall be used: fuel gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rule 1081]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-46-9 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

62.5 MMBTU/HR GAS-FIRED STRUTHERS STEAM GENERATOR (HSG #502; DIS# 20650-81) WITH NORTH AMERICAN BURNER (NORTH MIDWAY LEASE)

- 1. In accordance with the provisions of Rule 4305 Section 7.4, amended 12/19/96, this unit may only be operated after the permittee has submitted an application for Authority to Construct for any modification necessary to comply with Rule 4305. [District Rule 4305]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% carbon dioxide). [District Rule 4301]
- 4. All combustion equipment (burner, combustion air controls, etc.) shall be operated and maintained as intended by manufacturer. [District Rule 2080]
- 5. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District Rule 2080]
- 6. When gas firing, compliance source testing for fuel gas sulfur content shall be conducted annually (or as approved by the District) within 60 days prior to the permit anniversary. [District Rule 1070]
- 7. The sample collection shall be conducted under conditions (fuel quality, firing rate, waste gas incineration, air fuel ratio, etc.) expected to result in emissions representative of normal operation. [District Rule 1081]
- 8. The operational conditions during compliance testing may be imposed as permit requirements. [District Rule 2080]
- 9. Should source testing indicate an emission factor higher than that approved, the operator shall comply with Rule 1100 and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District NSR Rule]
- 10. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District NSR Rule]
- 11. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule]
- 12. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District NSR Rule]
- 13. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District NSR Rule]
- 14. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District NSR Rule]
- 15. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District NSR Rule]
- 16. Emissions assessed to the SLC for this unit are PM10: 9.6 lb/day, SOx (as SO2): 108.8 lb/day, NOx (as NO2): 54.0 lb/day, VOC: 2.9 lb/day, and CO: 6.7 lb/day [District Rule 2201]
- 17. Emission rates shall not exceed PM10: 0.010 lb/MMBtu, SOx (as SO2): 0.113 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu, VOC: 0.003 lb/MMBtu, and CO: 0.007 lb/MMBtu. [District Rule 2201]
- 18. Emission rates from all permit units in the Western Heavy Oil Source SLC Compliance Plan shall not exceed PM10: 545.6 lb/day, SOx (as SO2): 6,237.6 lb/day, NOx (as NO2): 1,708.6 lb/day, VOC: 59.8 lb/day, and CO: 282.6 lb/day. [District Rule 2201]
- 19. This permit unit shall comply with NOx and sulfur compound emission requirements as specified in Rules 4405 and 4406. [District Rules 4405 and 4406]

flowrates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. [District Rule 2201]

20.

21.

For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas

The following test methods shall be used: fuel gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rule 1081]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-47-8 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

3.5 MW GAS TURBINE ENGINE COGENERATION UNIT #1 - MCKITTRICK

- 1. Units shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333(a) & (b);60.332(a); Kern County Rule 407], [Federally Enforceable Through Title V]
- 2. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf . [District Rule 4201; Kern County Rule 404], [Federally Enforceable Through Title V]
- 3. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081; Kern County Rule 108.1], [Federally Enforceable Through Title V]
- 4. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [40 CFR 60.335(d)], [Federally Enforceable Through Title V]
- 5. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(b)(2)], [Federally Enforceable Through Title V]
- 6. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b) and District Rule 4703, 6.4.5], [Federally Enforceable Through Title V]
- 7. Nitrogen oxides (NOx) concentrations shall be determined using EPA Method 7E or 20, and oxygen (O2) concentrations shall be determined using EPA Method 3, 3A, or 20. [40 CFR 60.335(b) and District Rule 4703, 6.4], [Federally Enforceable Through Title V]
- 8. The operator shall provide source test information annually regarding the exhaust gas NOx concentration corrected to 15% O2 (dry). [40 CFR 60.332(a), (b) and District Rule 4703, 5.1], [Federally Enforceable Through Title V]
- 9. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner on and off. [40 CFR 60.335(b) and District Rule 4703, 6.3.2], [Federally Enforceable Through Title V]
- 10. If the turbine is fired on PUC-regulated natural gas, then the operator shall maintain a log describing the source of natural gas and the quantity used. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 11. The operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 12. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, source(s) of and quantity of fuel used, fuel sulfur content and fuel nitrogen content. [40 CFR 60.332(a),(b); District Rules 2520, 9.3.2 and 4703, 6.2.4], [Federally Enforceable Through Title V]
- 13. The following types of units are not affected units subject to the requirements of the Acid Rain Program: 1) A simple combustion turbine that commenced operation before November 15, 1990, 2) Any unit that, during 1985, did not serve a generator that produced electricity for sale and that did not, as of November 15, 1990, and does not currently, serve a generator that produces electricity for sale, 3) A cogeneration facility which for a unit that commenced construction prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than 219,000 Mwe-hrs actual electric output on an annual basis to any utility power distribution system for sale. Therefore, the requirements of 40 CFR 72.6 do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 14. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 1081, 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404(Madera); 40 CFR 60.332(c), (d); 60.334 (b), and (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

- 15. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: SJVUAPCD Rule 4703, 6.2.2; Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern and Stanislaus), and 110 (Madera); Rules 402 (Madera) and 404 (Fresno, Kern, Kings, San Joaquin, Merced, Stanislaus, Tulare); 40 CFR 60.332 (a) and (b); 60.333(a) and (b); 60.334 (a), (b), and (c)(1); 60.335 (a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 16. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 17. Permittee shall install, operate and maintain in calibration a predictive emissions monitoring system which continuously measures and records the water-to-fuel ratio and which correlates the water-to-fuel ratio with the NOx concentration in the exhaust by using the method described in 40 CFR 60.335(c). [40 CFR 60.334], [Federally Enforceable Through Title V]
- 18. Permittee shall submit to the APCO the information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703, 6.2.3], [Federally Enforceable Through Title V]
- 19. Permittee shall install, operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [40 CFR 60.334 and District Rule 4703, 6.2.1], [Federally Enforceable Through Title V]
- 20. Permittee shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form to the APCO semiannually, except when more frequent reporting is specifically required by an applicable subpart. All reports shall be postmarked by the 30th day of each calendar half (or quarter, as appropriate). [40 CFR 60.7(c)], [Federally Enforceable Through Title V]
- 21. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance shall be reported to the APCO. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, turbine gas load and nitrogen content of the fuel during the period of excess emissions. [40 CFR 60.334(c)], [Federally Enforceable Through Title V]
- 22. Cogeneration unit includes 48.7 MMBtu/hr Allison, model 501-KB-5, gas fired turbine engine with either pilotless fuel nozzles or conventional fuel nozzles and 20.0 MMBtu/hr gas fired Forney duct burner. [District NSR Rule], [Federally Enforceable Through Title V]
- 23. Cogeneration unit includes Ideal synchronous electrical generator, Struthers-Wells unfired 22.5 MMBtu/hr steam generator, and an inlet air evaporative cooler. [District NSR Rule], [Federally Enforceable Through Title V]
- 24. Turbine lube oil tank shall vent only through CECO Model #STTOR-10 fiber bed filter system. [District NSR Rule], [Federally Enforceable Through Title V]
- 25. Fuel gas sulfur content shall not exceed 14 ppmv as hydrogen sulfide (H2S). [District NSR Rule], [Federally Enforceable Through Title V]
- 26. Permittee shall notify the District by fax or in writing prior to or within 4 hours of any turbine nozzle replacement, except for identical replacement. [District NSR Rule], [Federally Enforceable Through Title V]
- 27. Except during periods of startup/shutdown, emission rates (3 hr average) shall not exceed: PM10: 0.61 lb/hr; SOx (as SO2): 0.16 lb/hr; NOx (as NO2): 30 ppmvd @ 15% O2; VOC: 1.65 lb/hr; and CO: 29 ppmvd @ 15% O2. [District NSR Rule], [Federally Enforceable Through Title V]
- 28. NOx (as NO2) and SOx (as SO2) emission rates (1 hr average) shall not exceed NSPS standard of 150 ppmv-dry @ 15% O2, and 150 ppmv-dry @ 15% O2, respectively. [District Rule 2520, 9.3.2; 40 CFR 60.332(c) and 40 CFR 60.333(a)], [Federally Enforceable Through Title V]
- 29. Emissions shall not exceed the following: PM10: 14.6 lb/day; SOx (as SO2): 3.8 lb/day; NOx (as NO2): 182.4 lb/day; VOC: 39.6 lb/day; and CO: 107.8 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 30. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption in gas turbine for normal operation and startup/shutdown periods. [District NSR Rule], [Federally Enforceable Through Title V]
- 31. Generator gearbox lube oil tank shall vent only through CECO Model #STTOR-10 fiber bed filter system. [District NSR Rule], [Federally Enforceable Through Title V]
- 32. Gas turbine engine shall be equipped with continuously recording fuel gas flow rate monitor. [District NSR Rule], [Federally Enforceable Through Title V]
- 33. Gas turbine engine shall be equipped with water injection system for NOx control. [District NSR Rule], [Federally Enforceable Through Title V]
- 34. Gas turbine engine shall be equipped with continuously recording water injection rate monitor accurate to within 5%. [District NSR Rule], [Federally Enforceable Through Title V]
- 35. Waste heat recovery steam generator exhaust shall be equipped with permanent provisions to allow collection of gas samples consistent with EPA methods. [District NSR Rule], [Federally Enforceable Through Title V]
- 36. Gas turbine shall be fired exclusively with PUC quality natural gas or equivalent. [District NSR Rule], [Federally Enforceable Through Title V]

- 37. Gas turbine engine water injection rate shall be maintained at a water to fuel ratio no less than 0.48/1.0 by weight while operating with pilotless fuel nozzles and no less than 0.8/1.0 by weight while operating with conventional fuel nozzles. [District NSR Rule], [Federally Enforceable Through Title V]
- 38. Maximum emission rate of volatile organic compounds (VOC's) from turbine lube oil vent shall not exceed 0.02 lb/hr. [District NSR Rule], [Federally Enforceable Through Title V]
- 39. Compliance testing of lube oil vent and gearbox vent shall be required if monthly visible emissions checks from either vent exceeds 5% opacity or equivalent Ringelmann 1/4. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. If visible emissions cannot be corrected within 24 hours, a visible emissions test using EPA Method 9 shall be conducted. [District Rules 2520, 9.3.2 and NSR], [Federally Enforceable Through Title V]
- 40. Permittee shall keep accurate records of fuel sulfur content as required, and such records shall be made available for District inspection for five years. [40 CFR 60.334(b)(2), District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 41. Annual compliance with GTE/duct burner NOx and CO emission limits (pursuant to Rule 4703 (10/16/97)) and fuel sulfur limit shall be demonstrated by District witnessed sample collection by independent laboratory. Test results shall be submitted within 60 days. [District Rules 4703 and NSR], [Federally Enforceable Through Title V]
- 42. The following test methods shall be used: CO (ppmv) EPA Method 10 or 10B, and fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rules 2520, 9.3.2 and 4703], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-48-8 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

3.5 MW GAS TURBINE ENGINE COGENERATION UNIT #2 - MCKITTRICK

- 1. Units shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333(a) & (b);60.332(a); Kern County Rule 407], [Federally Enforceable Through Title V]
- 2. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf . [District Rule 4201; Kern County Rule 404], [Federally Enforceable Through Title V]
- 3. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081; Kern County Rule 108.1], [Federally Enforceable Through Title V]
- 4. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [40 CFR 60.335(d)], [Federally Enforceable Through Title V]
- 5. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(b)(2)], [Federally Enforceable Through Title V]
- 6. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b) and District Rule 4703, 6.4.5], [Federally Enforceable Through Title V]
- 7. Nitrogen oxides (NOx) concentrations shall be determined using EPA Method 7E or 20, and oxygen (O2) concentrations shall be determined using EPA Method 3, 3A, or 20. [40 CFR 60.335(b) and District Rule 4703, 6.4], [Federally Enforceable Through Title V]
- 8. The operator shall provide source test information annually regarding the exhaust gas NOx concentration corrected to 15% O2 (dry). [40 CFR 60.332(a), (b) and District Rule 4703, 5.1], [Federally Enforceable Through Title V]
- 9. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner on and off. [40 CFR 60.335(b) and District Rule 4703, 6.3.2], [Federally Enforceable Through Title V]
- 10. If the turbine is fired on PUC-regulated natural gas, then the operator shall maintain a log describing the source of natural gas and the quantity used. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 11. The operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 12. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, source(s) of and quantity of fuel used, fuel sulfur content and fuel nitrogen content. [40 CFR 60.332(a),(b); District Rules 2520, 9.3.2 and 4703, 6.2.4], [Federally Enforceable Through Title V]
- 13. The following types of units are not affected units subject to the requirements of the Acid Rain Program: 1) A simple combustion turbine that commenced operation before November 15, 1990, 2) Any unit that, during 1985, did not serve a generator that produced electricity for sale and that did not, as of November 15, 1990, and does not currently, serve a generator that produces electricity for sale, 3) A cogeneration facility which for a unit that commenced construction prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than 219,000 Mwe-hrs actual electric output on an annual basis to any utility power distribution system for sale. Therefore, the requirements of 40 CFR 72.6 do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 14. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 1081, 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404(Madera); 40 CFR 60.332(c), (d); 60.334 (b), and (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

- 15. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: SJVUAPCD Rule 4703, 6.2.2; Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern and Stanislaus), and 110 (Madera); Rules 402 (Madera) and 404 (Fresno, Kern, Kings, San Joaquin, Merced, Stanislaus, Tulare); 40 CFR 60.332 (a) and (b); 60.333(a) and (b); 60.334 (a), (b), and (c)(1); 60.335 (a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 16. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 17. Permittee shall install, operate and maintain in calibration a predictive emissions monitoring system which continuously measures and records the water-to-fuel ratio and which correlates the water-to-fuel ratio with the NOx concentration in the exhaust by using the method described in 40 CFR 60.335(c). [40 CFR 60.334], [Federally Enforceable Through Title V]
- 18. Permittee shall submit to the APCO the information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703, 6.2.3], [Federally Enforceable Through Title V]
- 19. Permittee shall install, operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [40 CFR 60.334 and District Rule 4703, 6.2.1], [Federally Enforceable Through Title V]
- 20. Permittee shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form to the APCO semiannually, except when more frequent reporting is specifically required by an applicable subpart. All reports shall be postmarked by the 30th day of each calendar half (or quarter, as appropriate). [40 CFR 60.7(c)], [Federally Enforceable Through Title V]
- 21. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance shall be reported to the APCO. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, turbine gas load and nitrogen content of the fuel during the period of excess emissions. [40 CFR 60.334(c)], [Federally Enforceable Through Title V]
- 22. Cogeneration unit includes 48.7 MMBtu/hr Allison, model 501-KB-5, gas fired turbine engine with either pilotless fuel nozzles or conventional fuel nozzles and 20.0 MMBtu/hr gas fired Forney duct burner. [District NSR Rule], [Federally Enforceable Through Title V]
- 23. Cogeneration unit includes Ideal synchronous electrical generator, Struthers-Wells unfired 22.5 MMBtu/hr steam generator, and an inlet air evaporative cooler. [District NSR Rule], [Federally Enforceable Through Title V]
- 24. Turbine lube oil tank shall vent only through CECO Model #STTOR-10 fiber bed filter system. [District NSR Rule], [Federally Enforceable Through Title V]
- 25. Fuel gas sulfur content shall not exceed 14 ppmv as hydrogen sulfide (H2S). [District NSR Rule], [Federally Enforceable Through Title V]
- 26. Permittee shall notify the District by fax or in writing prior to or within 4 hours of any turbine nozzle replacement, except for identical replacement. [District NSR Rule], [Federally Enforceable Through Title V]
- 27. Except during periods of startup/shutdown, emission rates (3 hr average) shall not exceed: PM10: 0.61 lb/hr; SOx (as SO2): 0.16 lb/hr; NOx (as NO2): 30 ppmvd @ 15% O2; VOC: 1.65 lb/hr; and CO: 29 ppmvd @ 15% O2. [District NSR Rule], [Federally Enforceable Through Title V]
- 28. NOx (as NO2) and SOx (as SO2) emission rates (1 hr average) shall not exceed NSPS standard of 150 ppmv-dry @ 15% O2, and 150 ppmv-dry @ 15% O2, respectively. [District Rule 2520, 9.3.2; 40 CFR 60.332(c) and 40 CFR 60.333(a)], [Federally Enforceable Through Title V]
- 29. Emissions shall not exceed the following: PM10: 14.6 lb/day; SOx (as SO2): 3.8 lb/day; NOx (as NO2): 182.4 lb/day; VOC: 39.6 lb/day; and CO: 107.8 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 30. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption in gas turbine for normal operation and startup/shutdown periods. [District NSR Rule], [Federally Enforceable Through Title V]
- 31. Generator gearbox lube oil tank shall vent only through CECO Model #STTOR-10 fiber bed filter system. [District NSR Rule], [Federally Enforceable Through Title V]
- 32. Gas turbine engine shall be equipped with continuously recording fuel gas flow rate monitor. [District NSR Rule], [Federally Enforceable Through Title V]
- 33. Gas turbine engine shall be equipped with water injection system for NOx control. [District NSR Rule], [Federally Enforceable Through Title V]
- 34. Gas turbine engine shall be equipped with continuously recording water injection rate monitor accurate to within 5%. [District NSR Rule], [Federally Enforceable Through Title V]
- 35. Waste heat recovery steam generator exhaust shall be equipped with permanent provisions to allow collection of gas samples consistent with EPA methods. [District NSR Rule], [Federally Enforceable Through Title V]
- 36. Gas turbine shall be fired exclusively with PUC quality natural gas or equivalent. [District NSR Rule], [Federally Enforceable Through Title V]

- 37. Gas turbine engine water injection rate shall be maintained at a water to fuel ratio no less than 0.48/1.0 by weight while operating with pilotless fuel nozzles and no less than 0.8/1.0 by weight while operating with conventional fuel nozzles. [District NSR Rule], [Federally Enforceable Through Title V]
- 38. Maximum emission rate of volatile organic compounds (VOC's) from turbine lube oil vent shall not exceed 0.02 lb/hr. [District NSR Rule], [Federally Enforceable Through Title V]
- 39. Compliance testing of lube oil vent and gearbox vent shall be required if monthly visible emissions checks from either vent exceeds 5% opacity or equivalent Ringelmann 1/4. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. If visible emissions cannot be corrected within 24 hours, a visible emissions test using EPA Method 9 shall be conducted. [District Rules 2520, 9.3.2 and NSR], [Federally Enforceable Through Title V]
- 40. Permittee shall keep accurate records of fuel sulfur content as required, and such records shall be made available for District inspection for five years. [40 CFR 60.334(b)(2), District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 41. Annual compliance with GTE/duct burner NOx and CO emission limits (pursuant to Rule 4703 (10/16/97)) and fuel sulfur limit shall be demonstrated by District witnessed sample collection by independent laboratory. Test results shall be submitted within 60 days. [District Rules 4703 and NSR], [Federally Enforceable Through Title V]
- 42. The following test methods shall be used: CO (ppmv) EPA Method 10 or 10B, and fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rules 2520, 9.3.2 and 4703], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-49-8 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

3.5 MW GAS TURBINE ENGINE COGENERATION UNIT #3 - MCKITTRICK

- 1. Units shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333(a) & (b);60.332(a); Kern County Rule 407], [Federally Enforceable Through Title V]
- 2. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf . [District Rule 4201; Kern County Rule 404], [Federally Enforceable Through Title V]
- 3. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081; Kern County Rule 108.1], [Federally Enforceable Through Title V]
- 4. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [40 CFR 60.335(d)], [Federally Enforceable Through Title V]
- 5. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(b)(2)], [Federally Enforceable Through Title V]
- 6. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b) and District Rule 4703, 6.4.5], [Federally Enforceable Through Title V]
- 7. Nitrogen oxides (NOx) concentrations shall be determined using EPA Method 7E or 20, and oxygen (O2) concentrations shall be determined using EPA Method 3, 3A, or 20. [40 CFR 60.335(b) and District Rule 4703, 6.4], [Federally Enforceable Through Title V]
- 8. The operator shall provide source test information annually regarding the exhaust gas NOx concentration corrected to 15% O2 (dry). [40 CFR 60.332(a), (b) and District Rule 4703, 5.1], [Federally Enforceable Through Title V]
- 9. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner on and off. [40 CFR 60.335(b) and District Rule 4703, 6.3.2], [Federally Enforceable Through Title V]
- 10. If the turbine is fired on PUC-regulated natural gas, then the operator shall maintain a log describing the source of natural gas and the quantity used. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 11. The operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 12. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, source(s) of and quantity of fuel used, fuel sulfur content and fuel nitrogen content. [40 CFR 60.332(a),(b); District Rules 2520, 9.3.2 and 4703, 6.2.4], [Federally Enforceable Through Title V]
- 13. The following types of units are not affected units subject to the requirements of the Acid Rain Program: 1) A simple combustion turbine that commenced operation before November 15, 1990, 2) Any unit that, during 1985, did not serve a generator that produced electricity for sale and that did not, as of November 15, 1990, and does not currently, serve a generator that produces electricity for sale, 3) A cogeneration facility which for a unit that commenced construction prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than 219,000 Mwe-hrs actual electric output on an annual basis to any utility power distribution system for sale. Therefore, the requirements of 40 CFR 72.6 do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 14. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 1081, 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404(Madera); 40 CFR 60.332(c), (d); 60.334 (b), and (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

- 15. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: SJVUAPCD Rule 4703, 6.2.2; Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern and Stanislaus), and 110 (Madera); Rules 402 (Madera) and 404 (Fresno, Kern, Kings, San Joaquin, Merced, Stanislaus, Tulare); 40 CFR 60.332 (a) and (b); 60.333(a) and (b); 60.334 (a), (b), and (c)(1); 60.335 (a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 16. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 17. Permittee shall install, operate and maintain in calibration a predictive emissions monitoring system which continuously measures and records the water-to-fuel ratio and which correlates the water-to-fuel ratio with the NOx concentration in the exhaust by using the method described in 40 CFR 60.335(c). [40 CFR 60.334], [Federally Enforceable Through Title V]
- 18. Permittee shall submit to the APCO the information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703, 6.2.3], [Federally Enforceable Through Title V]
- 19. Permittee shall install, operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [40 CFR 60.334 and District Rule 4703, 6.2.1], [Federally Enforceable Through Title V]
- 20. Permittee shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form to the APCO semiannually, except when more frequent reporting is specifically required by an applicable subpart. All reports shall be postmarked by the 30th day of each calendar half (or quarter, as appropriate). [40 CFR 60.7(c)], [Federally Enforceable Through Title V]
- 21. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance shall be reported to the APCO. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, turbine gas load and nitrogen content of the fuel during the period of excess emissions. [40 CFR 60.334(c)], [Federally Enforceable Through Title V]
- 22. Cogeneration unit includes 48.7 MMBtu/hr Allison, model 501-KB-5, gas fired turbine engine with either pilotless fuel nozzles or conventional fuel nozzles and 20.0 MMBtu/hr gas fired Forney duct burner. [District NSR Rule], [Federally Enforceable Through Title V]
- 23. Cogeneration unit includes Ideal synchronous electrical generator, Struthers-Wells unfired 22.5 MMBtu/hr steam generator, and an inlet air evaporative cooler. [District NSR Rule], [Federally Enforceable Through Title V]
- 24. Turbine lube oil tank shall vent only through CECO Model #STTOR-10 fiber bed filter system. [District NSR Rule], [Federally Enforceable Through Title V]
- 25. Fuel gas sulfur content shall not exceed 14 ppmv as hydrogen sulfide (H2S). [District NSR Rule], [Federally Enforceable Through Title V]
- 26. Permittee shall notify the District by fax or in writing prior to or within 4 hours of any turbine nozzle replacement, except for identical replacement. [District NSR Rule], [Federally Enforceable Through Title V]
- 27. Except during periods of startup/shutdown, emission rates (3 hr average) shall not exceed: PM10: 0.61 lb/hr; SOx (as SO2): 0.16 lb/hr; NOx (as NO2): 30 ppmvd @ 15% O2; VOC: 1.65 lb/hr; and CO: 29 ppmvd @ 15% O2. [District NSR Rule], [Federally Enforceable Through Title V]
- 28. NOx (as NO2) and SOx (as SO2) emission rates (1 hr average) shall not exceed NSPS standard of 150 ppmv-dry @ 15% O2, and 150 ppmv-dry @ 15% O2, respectively. [District Rule 2520, 9.3.2; 40 CFR 60.332(c) and 40 CFR 60.333(a)], [Federally Enforceable Through Title V]
- 29. Emissions shall not exceed the following: PM10: 14.6 lb/day; SOx (as SO2): 3.8 lb/day; NOx (as NO2): 182.4 lb/day; VOC: 39.6 lb/day; and CO: 107.8 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 30. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption in gas turbine for normal operation and startup/shutdown periods. [District NSR Rule], [Federally Enforceable Through Title V]
- 31. Generator gearbox lube oil tank shall vent only through CECO Model #STTOR-10 fiber bed filter system. [District NSR Rule], [Federally Enforceable Through Title V]
- 32. Gas turbine engine shall be equipped with continuously recording fuel gas flow rate monitor. [District NSR Rule], [Federally Enforceable Through Title V]
- 33. Gas turbine engine shall be equipped with water injection system for NOx control. [District NSR Rule], [Federally Enforceable Through Title V]
- 34. Gas turbine engine shall be equipped with continuously recording water injection rate monitor accurate to within 5%. [District NSR Rule], [Federally Enforceable Through Title V]
- 35. Waste heat recovery steam generator exhaust shall be equipped with permanent provisions to allow collection of gas samples consistent with EPA methods. [District NSR Rule], [Federally Enforceable Through Title V]
- 36. Gas turbine shall be fired exclusively with PUC quality natural gas or equivalent. [District NSR Rule], [Federally Enforceable Through Title V]

- 37. Gas turbine engine water injection rate shall be maintained at a water to fuel ratio no less than 0.48/1.0 by weight while operating with pilotless fuel nozzles and no less than 0.8/1.0 by weight while operating with conventional fuel nozzles. [District NSR Rule], [Federally Enforceable Through Title V]
- 38. Maximum emission rate of volatile organic compounds (VOC's) from turbine lube oil vent shall not exceed 0.02 lb/hr. [District NSR Rule], [Federally Enforceable Through Title V]
- 39. Compliance testing of lube oil vent and gearbox vent shall be required if monthly visible emissions checks from either vent exceeds 5% opacity or equivalent Ringelmann 1/4. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. If visible emissions cannot be corrected within 24 hours, a visible emissions test using EPA Method 9 shall be conducted. [District Rules 2520, 9.3.2 and NSR], [Federally Enforceable Through Title V]
- 40. Permittee shall keep accurate records of fuel sulfur content as required, and such records shall be made available for District inspection for five years. [40 CFR 60.334(b)(2), District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 41. Annual compliance with GTE/duct burner NOx and CO emission limits (pursuant to Rule 4703 (10/16/97)) and fuel sulfur limit shall be demonstrated by District witnessed sample collection by independent laboratory. Test results shall be submitted within 60 days. [District Rules 4703 and NSR], [Federally Enforceable Through Title V]
- 42. The following test methods shall be used: CO (ppmv) EPA Method 10 or 10B, and fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rules 2520, 9.3.2 and 4703], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-53-6 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

3.5 MW COMBINED CYCLE GAS TURBINE TOPPING CYCLE COGENERATION NORTH MIDWAY UNIT #7

- 1. Units shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333(a) & (b);60.332(a); Kern County Rule 407], [Federally Enforceable Through Title V]
- 2. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf . [District Rule 4201; Kern County Rule 404], [Federally Enforceable Through Title V]
- 3. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081; Kern County Rule 108.1], [Federally Enforceable Through Title V]
- 4. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [40 CFR 60.335(d)], [Federally Enforceable Through Title V]
- 5. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b) and District Rule 4703, 6.4.5], [Federally Enforceable Through Title V]
- 6. Nitrogen oxides (NOx) concentrations shall be determined using EPA Method 7E or 20, and oxygen (O2) concentrations shall be determined using EPA Method 3, 3A, or 20. [40 CFR 60.335(b) and District Rule 4703, 6.4], [Federally Enforceable Through Title V]
- 7. The operator shall provide source test information annually regarding the exhaust gas NOx concentration corrected to 15% O2 (dry). [40 CFR 60.332(a), (b) and District Rule 4703, 5.1], [Federally Enforceable Through Title V]
- 8. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner on and off. [40 CFR 60.335(b) and District Rule 4703, 6.3.2], [Federally Enforceable Through Title V]
- 9. If the turbine is fired on PUC-regulated natural gas, then the operator shall maintain a log describing the source of natural gas and the quantity used. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 10. The operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 11. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, source(s) of and quantity of fuel used, fuel sulfur content and fuel nitrogen content. [40 CFR 60.332(a),(b); District Rules 2520, 9.3.2 and 4703, 6.2.4], [Federally Enforceable Through Title V]
- 12. The following types of units are not affected units subject to the requirements of the Acid Rain Program: 1) A simple combustion turbine that commenced operation before November 15, 1990, 2) Any unit that, during 1985, did not serve a generator that produced electricity for sale and that did not, as of November 15, 1990, and does not currently, serve a generator that produces electricity for sale, 3) A cogeneration facility which for a unit that commenced construction prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than 219,000 Mwe-hrs actual electric output on an annual basis to any utility power distribution system for sale. Therefore, the requirements of 40 CFR 72.6 do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 13. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 1081, 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404(Madera); 40 CFR 60.332(c), (d); 60.334 (b), and (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 14. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: SJVUAPCD Rule 4703, 6.2.2; Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern and Stanislaus), and 110 (Madera); Rules 402 (Madera) and 404 (Fresno, Kern, Kings, San Joaquin, Merced, Stanislaus, Tulare); 40 CFR 60.332 (a) and (b); 60.333(a) and (b); 60.334 (a), (b), and (c)(1); 60.335 (a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

- 15. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, 6.4.6. A permit shield is granted from these requirements.

 [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 16. Permittee shall install, operate and maintain in calibration a continuous monitoring system which continuously measures and records the water-to-fuel ratio and which correlates the water-to-fuel ratio with the NOx concentration in the exhaust by using the method described in 40 CFR 60.335(c). [40 CFR 60.334], [Federally Enforceable Through Title V]
- 17. Permittee shall submit to the APCO the information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703, 6.2.3], [Federally Enforceable Through Title V]
- 18. Permittee shall install, operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [District Rule 4703, 6.2.1], [Federally Enforceable Through Title V]
- 19. Permittee shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form to the APCO semiannually, except when more frequent reporting is specifically required by an applicable subpart. All reports shall be postmarked by the 30th day of each calendar half (or quarter, as appropriate). [40 CFR 60.7(c)], [Federally Enforceable Through Title V]
- 20. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance shall be reported to the APCO. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, turbine gas load and nitrogen content of the fuel during the period of excess emissions. [40 CFR 60.334(c)], [Federally Enforceable Through Title V]
- 21. All wells producing from strata steamed by this unit shall be connected to a District-approved emissions control system, have District-approved closed casing vents or be District-approved uncontrolled cyclic wells. [District Rule 4401, 5.0], [Federally Enforceable Through Title V]
- 22. Cogeneration unit shall include 48.7 MMBtu/hr Allison, model 501-KB-5, gas-fired turbine engine with pilotless fuel nozzles or conventional fuel nozzles, Ideal Synchronous electrical generator, Struthers-Wells unfired 22.5 MMBtu/hr steam generator and an inlet air evaporative cooler. [District NSR Rule], [Federally Enforceable Through Title V]
- 23. Turbine lube oil tank shall vent only through CECO Model #STTOR-10 fiber bed filter system. [District NSR Rule], [Federally Enforceable Through Title V]
- 24. Generator gearbox lube oil tank shall vent only through CECO Model #STTOR-10 fiber bed filter system. [District NSR Rule], [Federally Enforceable Through Title V]
- 25. Permittee shall notify the District by fax or in writing prior to or within 4 hours of any turbine nozzle replacement, except for identical replacement. [District NSR Rule], [Federally Enforceable Through Title V]
- 26. Gas turbine engine shall be equipped with continuously recording fuel gas flow rate monitor. [District NSR Rule], [Federally Enforceable Through Title V]
- 27. Gas turbine engine shall be equipped with water injection system for NOx control. [District NSR Rule], [Federally Enforceable Through Title V]
- 28. Gas turbine engine shall be equipped with continuously recording water injection rate monitor accurate to within 5%. [District NSR Rule], [Federally Enforceable Through Title V]
- 29. Waste heat recovery steam generator exhaust shall be equipped with permanent provisions to allow collection of gas samples consistent with EPA methods. [District NSR Rule], [Federally Enforceable Through Title V]
- 30. Gas turbine shall be fired exclusively with PUC quality natural gas or equivalent. [District NSR Rule], [Federally Enforceable Through Title V]
- 31. Gas turbine engine water injection rate shall be maintained at a water to fuel ratio no less than 0.48/1.0 by weight while operating with pilotless fuel nozzles and no less than 0.8/1.0 by weight while operating with conventional fuel nozzles. [District NSR Rule], [Federally Enforceable Through Title V]
- 32. Evaporative cooler shall use only fresh and filtered water. [District NSR Rule], [Federally Enforceable Through Title V]
- 33. Fiber bed filter system shall be maintained and operated in accordance with the manufacturer's plans and specifications. [District NSR Rule], [Federally Enforceable Through Title V]
- 34. Maximum emission rate of volatile organic compounds (VOC's) from turbine lube oil vent shall not exceed 0.02 lb/hr. [District NSR Rule], [Federally Enforceable Through Title V]
- 35. Fuel gas sulfur content shall not exceed 19.5 ppmv as hydrogen sulfide (H2S). [District NSR Rule], [Federally Enforceable Through Title V]
- 36. Except during periods of startup/shutdown, emission rates (3 hr average) shall not exceed: PM10: 0.61 lb/hr; SOx (as SO2): 0.16 lb/hr; NOx (as NO2): 42 ppmvd @ 15% O2; VOC: 1.65 lb/hr; and CO: 41 ppmvd @ 15% O2. [District NSR Rule], [Federally Enforceable Through Title V]

- 37. Emissions shall not exceed the following: PM10: 14.6 lb/day; SOx (as SO2): 3.8 lb/day; NOx (as NO2): 182.4 lb/day; VOC: 39.6 lb/day; and CO: 107.8 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 38. NOx (as NO2) and SOx (as SO2) emission rates (1 hr average) shall not exceed NSPS standard of 150 ppmv-dry @ 15% O2, and 150 ppmv-dry @ 15% O2, respectively. [District Rule 2520, 9.3.2; 40 CFR 60.332(c); 40 CFR 60.333(a)], [Federally Enforceable Through Title V]
- 39. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption in gas turbine for normal operation and startup/shutdown periods. [District NSR Rule], [Federally Enforceable Through Title V]
- 40. Compliance testing of lube oil vent and gearbox vent shall be required if monthly visible emissions checks from either vent exceeds 5% opacity or equivalent Ringelmann 1/4. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. If visible emissions cannot be corrected within 24 hours, a visible emissions test using EPA Method 9 shall be conducted. [District Rules 2520, 9.3.2 and NSR], [Federally Enforceable Through Title V]
- 41. Permittee shall keep accurate monthly records of fuel sulfur content, and such records shall be made available for District inspection for five years. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 42. Annual compliance with GTE NOx and CO emission limits (pursuant to Rule 4703 (10/16/97)) and fuel sulfur limit shall be demonstrated by District witnessed sample collection by independent laboratory. Test results shall be submitted within 60 days. [District Rules 4703 and NSR], [Federally Enforceable Through Title V]
- 43. The following test methods shall be used: CO (ppmv) EPA Method 10 or 10B, and fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rules 2520, 9.3.2 and 4703], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-54-7 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

3.5 MW COMBINED CYCLE GAS TURBINE TOPPING CYCLE COGENERATION UNIT #8. (NORTH MIDWAY)

- 1. Units shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333(a) & (b);60.332(a); Kern County Rule 407], [Federally Enforceable Through Title V]
- 2. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf . [District Rule 4201; Kern County Rule 404], [Federally Enforceable Through Title V]
- 3. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081; Kern County Rule 108.1], [Federally Enforceable Through Title V]
- 4. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [40 CFR 60.335(d)], [Federally Enforceable Through Title V]
- 5. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b) and District Rule 4703, 6.4.5], [Federally Enforceable Through Title V]
- 6. Nitrogen oxides (NOx) concentrations shall be determined using EPA Method 7E or 20, and oxygen (O2) concentrations shall be determined using EPA Method 3, 3A, or 20. [40 CFR 60.335(b) and District Rule 4703, 6.4], [Federally Enforceable Through Title V]
- 7. The operator shall provide source test information annually regarding the exhaust gas NOx concentration corrected to 15% O2 (dry). [40 CFR 60.332(a), (b) and District Rule 4703, 5.1], [Federally Enforceable Through Title V]
- 8. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner on and off. [40 CFR 60.335(b) and District Rule 4703, 6.3.2], [Federally Enforceable Through Title V]
- 9. If the turbine is fired on PUC-regulated natural gas, then the operator shall maintain a log describing the source of natural gas and the quantity used. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 10. The operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 11. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, source(s) of and quantity of fuel used, fuel sulfur content and fuel nitrogen content. [40 CFR 60.332(a),(b); District Rules 2520, 9.3.2 and 4703, 6.2.4], [Federally Enforceable Through Title V]
- 12. The following types of units are not affected units subject to the requirements of the Acid Rain Program: 1) A simple combustion turbine that commenced operation before November 15, 1990, 2) Any unit that, during 1985, did not serve a generator that produced electricity for sale and that did not, as of November 15, 1990, and does not currently, serve a generator that produces electricity for sale, 3) A cogeneration facility which for a unit that commenced construction prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than 219,000 Mwe-hrs actual electric output on an annual basis to any utility power distribution system for sale. Therefore, the requirements of 40 CFR 72.6 do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 13. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 1081, 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404(Madera); 40 CFR 60.332(c), (d); 60.334 (b), and (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 14. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: SJVUAPCD Rule 4703, 6.2.2; Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern and Stanislaus), and 110 (Madera); Rules 402 (Madera) and 404 (Fresno, Kern, Kings, San Joaquin, Merced, Stanislaus, Tulare); 40 CFR 60.332 (a) and (b); 60.333(a) and (b); 60.334 (a), (b), and (c)(1); 60.335 (a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

- 15. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, 6.4.6. A permit shield is granted from these requirements.

 [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 16. Permittee shall install, operate and maintain in calibration a continuous monitoring system which continuously measures and records the water-to-fuel ratio and which correlates the water-to-fuel ratio with the NOx concentration in the exhaust by using the method described in 40 CFR 60.335(c). [40 CFR 60.334], [Federally Enforceable Through Title V]
- 17. Permittee shall submit to the APCO the information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703, 6.2.3], [Federally Enforceable Through Title V]
- 18. Permittee shall install, operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [District Rule 4703, 6.2.1], [Federally Enforceable Through Title V]
- 19. Permittee shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form to the APCO semiannually, except when more frequent reporting is specifically required by an applicable subpart. All reports shall be postmarked by the 30th day of each calendar half (or quarter, as appropriate). [40 CFR 60.7(c)], [Federally Enforceable Through Title V]
- 20. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance shall be reported to the APCO. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, turbine gas load and nitrogen content of the fuel during the period of excess emissions. [40 CFR 60.334(c)], [Federally Enforceable Through Title V]
- 21. All wells producing from strata steamed by this unit shall be connected to a District-approved emissions control system, have District-approved closed casing vents or be District-approved uncontrolled cyclic wells. [District Rule 4401, 5.0], [Federally Enforceable Through Title V]
- 22. Cogeneration unit shall include 48.7 MMBtu/hr Allison, model 501-KB-5, gas-fired turbine engine with pilotless fuel nozzles or conventional fuel nozzles, Ideal Synchronous electrical generator, Struthers-Wells unfired 22.5 MMBtu/hr steam generator and Pneumafil, model 80-7MR, inlet air evaporative cooler. [District NSR Rule], [Federally Enforceable Through Title V]
- 23. Turbine lube oil tank shall vent only through CECO Model #STTOR-10 fiber bed filter system. [District NSR Rule], [Federally Enforceable Through Title V]
- 24. Generator gearbox lube oil tank shall vent only through CECO Model #STTOR-10 fiber bed filter system. [District NSR Rule], [Federally Enforceable Through Title V]
- 25. Permittee shall notify the District by fax or in writing prior to or within 4 hours of any turbine nozzle replacement, except for identical replacement. [District NSR Rule], [Federally Enforceable Through Title V]
- 26. Gas turbine engine shall be equipped with continuously recording fuel gas flow rate monitor. [District NSR Rule], [Federally Enforceable Through Title V]
- 27. Gas turbine engine shall be equipped with water injection system for NOx control. [District NSR Rule], [Federally Enforceable Through Title V]
- 28. Gas turbine engine shall be equipped with continuously recording water injection rate monitor accurate to within 5%. [District NSR Rule], [Federally Enforceable Through Title V]
- 29. Waste heat recovery steam generator exhaust shall be equipped with permanent provisions to allow collection of gas samples consistent with EPA methods. [District NSR Rule], [Federally Enforceable Through Title V]
- 30. Gas turbine shall be fired exclusively with PUC quality natural gas or equivalent. [District NSR Rule], [Federally Enforceable Through Title V]
- 31. Gas turbine engine water injection rate shall be maintained at a water to fuel ratio no less than 0.48/1.0 by weight while operating with pilotless fuel nozzles and no less than 0.8/1.0 by weight while operating with conventional fuel nozzles. [District NSR Rule], [Federally Enforceable Through Title V]
- 32. If water injection system is inoperative, the District shall be notified. [District NSR Rule], [Federally Enforceable Through Title V]
- 33. Evaporative cooler shall use only fresh and filtered water. [District NSR Rule], [Federally Enforceable Through Title V]
- 34. Fiber bed filter system shall be maintained and operated in accordance with the manufacturer's plans and specifications. [District NSR Rule], [Federally Enforceable Through Title V]
- 35. Maximum emission rate of volatile organic compounds (VOC's) from turbine lube oil vent shall not exceed 0.02 lb/hr. [District NSR Rule], [Federally Enforceable Through Title V]
- 36. Fuel gas sulfur content shall not exceed 19.5 ppmv as hydrogen sulfide (H2S). [District NSR Rule], [Federally Enforceable Through Title V]
- 37. Except during periods of startup/shutdown, emission rates (3 hr average) shall not exceed: PM10: 0.61 lb/hr; SOx (as SO2): 0.16 lb/hr; NOx (as NO2): 42 ppmvd @ 15% O2; VOC: 1.65 lb/hr; and CO: 41 ppmvd @ 15% O2. [District NSR Rule], [Federally Enforceable Through Title V]

- 38. Emissions shall not exceed the following: PM10: 14.6 lb/day; SOx (as SO2): 3.8 lb/day; NOx (as NO2): 182.4 lb/day; VOC: 39.6 lb/day; and CO: 107.8 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 39. NOx (as NO2) and SOx (as SO2) emission rates (1 hr average) shall not exceed NSPS standard of 150 ppmv-dry @ 15% O2, and 150 ppmv-dry @ 15% O2, respectively. [District Rule 2520, 9.3.2; 40 CFR 60.332(c), 40 CFR 60.333(a)], [Federally Enforceable Through Title V]
- 40. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption in gas turbine for normal operation and startup/shutdown periods. [District NSR Rule], [Federally Enforceable Through Title V]
- 41. Compliance testing of lube oil vent and gearbox vent shall be required if monthly visible emissions checks from either vent exceeds 5% opacity or equivalent Ringelmann 1/4. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. If visible emissions cannot be corrected within 24 hours, a visible emissions test using EPA Method 9 shall be conducted. [District Rules 2520, 9.3.2 and NSR], [Federally Enforceable Through Title V]
- 42. Permittee shall keep accurate records of fuel sulfur content as required, and such records shall be made available for District inspection for five years. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 43. Annual compliance with GTE NOx and CO emission limits (pursuant to Rule 4703 (10/16/97)) and fuel sulfur limit shall be demonstrated by District witnessed sample collection by independent laboratory. Test results shall be submitted within 60 days. [District Rules 4703 and NSR], [Federally Enforceable Through Title V]
- 44. The following test methods shall be used: CO (ppmv) EPA Method 10 or 10B, and fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rules 2520, 9.3.2 and 4703], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-55-6 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

3.5 MW COMBINED CYCLE GAS TURBINE TOPPING CYCLE COGENERATION NORTH MIDWAY UNIT #9

- 1. Units shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333(a) & (b);60.332(a); Kern County Rule 407], [Federally Enforceable Through Title V]
- 2. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf . [District Rule 4201; Kern County Rule 404], [Federally Enforceable Through Title V]
- 3. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081; Kern County Rule 108.1], [Federally Enforceable Through Title V]
- 4. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [40 CFR 60.335(d)], [Federally Enforceable Through Title V]
- 5. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b) and District Rule 4703, 6.4.5], [Federally Enforceable Through Title V]
- 6. Nitrogen oxides (NOx) concentrations shall be determined using EPA Method 7E or 20, and oxygen (O2) concentrations shall be determined using EPA Method 3, 3A, or 20. [40 CFR 60.335(b) and District Rule 4703, 6.4], [Federally Enforceable Through Title V]
- 7. The operator shall provide source test information annually regarding the exhaust gas NOx concentration corrected to 15% O2 (dry). [40 CFR 60.332(a), (b) and District Rule 4703, 5.1], [Federally Enforceable Through Title V]
- 8. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner on and off. [40 CFR 60.335(b) and District Rule 4703, 6.3.2], [Federally Enforceable Through Title V]
- 9. If the turbine is fired on PUC-regulated natural gas, then the operator shall maintain a log describing the source of natural gas and the quantity used. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 10. The operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 11. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, source(s) of and quantity of fuel used, fuel sulfur content and fuel nitrogen content. [40 CFR 60.332(a),(b); District Rules 2520, 9.3.2 and 4703, 6.2.4], [Federally Enforceable Through Title V]
- 12. The following types of units are not affected units subject to the requirements of the Acid Rain Program: 1) A simple combustion turbine that commenced operation before November 15, 1990, 2) Any unit that, during 1985, did not serve a generator that produced electricity for sale and that did not, as of November 15, 1990, and does not currently, serve a generator that produces electricity for sale, 3) A cogeneration facility which for a unit that commenced construction prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than 219,000 Mwe-hrs actual electric output on an annual basis to any utility power distribution system for sale. Therefore, the requirements of 40 CFR 72.6 do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 13. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 1081, 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404(Madera); 40 CFR 60.332(c), (d); 60.334 (b), and (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 14. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: SJVUAPCD Rule 4703, 6.2.2; Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern and Stanislaus), and 110 (Madera); Rules 402 (Madera) and 404 (Fresno, Kern, Kings, San Joaquin, Merced, Stanislaus, Tulare); 40 CFR 60.332 (a) and (b); 60.333(a) and (b); 60.334 (a), (b), and (c)(1); 60.335 (a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

- 15. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 16. Permittee shall install, operate and maintain in calibration a continuous monitoring system which continuously measures and records the water-to-fuel ratio and which correlates the water-to-fuel ratio with the NOx concentration in the exhaust by using the method described in 40 CFR 60.335(c). [40 CFR 60.334], [Federally Enforceable Through Title V]
- 17. Permittee shall submit to the APCO the information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703, 6.2.3], [Federally Enforceable Through Title V]
- 18. Permittee shall install, operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [District Rule 4703, 6.2.1], [Federally Enforceable Through Title V]
- 19. Permittee shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form to the APCO semiannually, except when more frequent reporting is specifically required by an applicable subpart. All reports shall be postmarked by the 30th day of each calendar half (or quarter, as appropriate). [40 CFR 60.7(c)], [Federally Enforceable Through Title V]
- 20. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance shall be reported to the APCO. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, turbine gas load and nitrogen content of the fuel during the period of excess emissions. [40 CFR 60.334(c)], [Federally Enforceable Through Title V]
- 21. All wells producing from strata steamed by this unit shall be connected to a District-approved emissions control system, have District-approved closed casing vents or be District-approved uncontrolled cyclic wells. [District Rule 4401, 5.0], [Federally Enforceable Through Title V]
- 22. Cogeneration unit shall include 48.7 MMBtu/hr Allison, model 501-KB-5, gas-fired turbine engine with pilotless fuel nozzles or conventional fuel nozzles, Ideal Synchronous electrical generator, Struthers-Wells unfired 22.5 MMBtu/hr steam generator and an inlet air evaporative cooler. [District NSR Rule], [Federally Enforceable Through Title V]
- 23. Turbine lube oil tank shall vent only through CECO Model #STTOR-10 fiber bed filter system. [District NSR Rule], [Federally Enforceable Through Title V]
- 24. Generator gearbox lube oil tank shall vent only through CECO Model #STTOR-10 fiber bed filter system. [District NSR Rule], [Federally Enforceable Through Title V]
- 25. Permittee shall notify the District by fax or in writing prior to or within 4 hours of any turbine nozzle replacement, except for identical replacement. [District NSR Rule], [Federally Enforceable Through Title V]
- 26. Gas turbine engine shall be equipped with continuously recording fuel gas flow rate monitor. [District NSR Rule], [Federally Enforceable Through Title V]
- 27. Gas turbine engine shall be equipped with water injection system for NOx control. [District NSR Rule], [Federally Enforceable Through Title V]
- 28. Gas turbine engine shall be equipped with continuously recording water injection rate monitor accurate to within 5%. [District NSR Rule], [Federally Enforceable Through Title V]
- 29. Waste heat recovery steam generator exhaust shall be equipped with permanent provisions to allow collection of gas samples consistent with EPA methods. [District NSR Rule], [Federally Enforceable Through Title V]
- 30. Gas turbine shall be fired exclusively with PUC quality natural gas or equivalent. [District NSR Rule], [Federally Enforceable Through Title V]
- 31. Gas turbine engine water injection rate shall be maintained at a water to fuel ratio no less than 0.48/1.0 by weight while operating with pilotless fuel nozzles and no less than 0.8/1.0 by weight while operating with conventional fuel nozzles. [District NSR Rule], [Federally Enforceable Through Title V]
- 32. Evaporative cooler shall use only fresh and filtered water. [District NSR Rule], [Federally Enforceable Through Title V]
- 33. Fiber bed filter system shall be maintained and operated in accordance with the manufacturer's plans and specifications. [District NSR Rule], [Federally Enforceable Through Title V]
- 34. Maximum emission rate of volatile organic compounds (VOC's) from turbine lube oil vent shall not exceed 0.02 lb/hr. [District NSR Rule], [Federally Enforceable Through Title V]
- 35. Fuel gas sulfur content shall not exceed 19.5 ppmv as hydrogen sulfide (H2S). [District NSR Rule], [Federally Enforceable Through Title V]
- 36. Except during periods of startup/shutdown, emission rates (3 hr average) shall not exceed: PM10: 0.61 lb/hr; SOx (as SO2): 0.16 lb/hr; NOx (as NO2): 42 ppmvd @ 15% O2; VOC: 1.65 lb/hr; and CO: 41 ppmvd @ 15% O2. [District NSR Rule], [Federally Enforceable Through Title V]

- 37. Emissions shall not exceed the following: PM10: 14.6 lb/day; SOx (as SO2): 3.8 lb/day; NOx (as NO2): 182.4 lb/day; VOC: 39.6 lb/day; and CO: 107.8 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 38. NOx (as NO2) and SOx (as SO2) emission rates (1 hr average) shall not exceed NSPS standard of 150 ppmv-dry @ 15% O2, and 150 ppmv-dry @ 15% O2, respectively. [District Rule 2520, 9.3.2; 40 CFR 60.332(c); 40 CFR 60.333(a)], [Federally Enforceable Through Title V]
- 39. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption in gas turbine for normal operation and startup/shutdown periods. [District NSR Rule], [Federally Enforceable Through Title V]
- 40. Compliance testing of lube oil vent and gearbox vent shall be required if monthly visible emissions checks from either vent exceeds 5% opacity or equivalent Ringelmann 1/4. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. If visible emissions cannot be corrected within 24 hours, a visible emissions test using EPA Method 9 shall be conducted. [District Rules 2520, 9.3.2 and NSR], [Federally Enforceable Through Title V]
- 41. Permittee shall keep accurate monthly records of fuel sulfur content, and such records shall be made available for District inspection for five years. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 42. Annual compliance with GTE NOx and CO emission limits (pursuant to Rule 4703 (10/16/97)) and fuel sulfur limit shall be demonstrated by District witnessed sample collection by independent laboratory. Test results shall be submitted within 60 days. [District Rules 4703 and NSR], [Federally Enforceable Through Title V]
- 43. The following test methods shall be used: CO (ppmv) EPA Method 10 or 10B, and fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rules 2520, 9.3.2 and 4703], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-56-11 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

27.5 MMBTU/HR GAS/WASTE GAS/OIL-FIRED STRUTHERS STEAM GENEREATOR (HSG #577) WITH NORTH AMERICAN BURNER ASSEMBLY

- 1. This steam generator is approved to operate at the following locations: Sections 7, 8, 16, 17, and 18 of T11N R23W and Section 7 of T30S R22E. [District Rule 2201]
- 2. The permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201]
- 3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 4. Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% carbon dioxide). [District Rule 4301]
- 5. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District Rule 2201]
- 6. Fuel oil sulfur content shall not exceed 1.40% by weight. [District Rule 2201]
- 7. Steam Generator shall not incinerate vapor recovery gas when fired on oil at Sec 7, T30S, R22E. [District Rule 2201]
- Maximum sulfur content of gas combusted shall not exceed the following: natural gas 0.3 grain/100 scf and 7W vapor recovery gas -10,000 ppmv H2S. [District Rule 2201]
- 9. H2S concentration of 7E vapor recovery gas combusted shall be reduced by 95% prior to combustion and H2S concentration shall not exceed 800 ppm. [District Rule 2201]
- 10. Maximum volume of vapor recovery gas combusted shall not exceed: 7E 225,000 scf/day and 7W 150,000 scf/day. [District Rule 2201]
- 11. 7W vapor recovery gas and natural gas lines to steam generator shall be equipped with volumetric flowrate indicators. [District Rule 2201]
- 12. All wells in Section 16, T11N, R23W steamed by this steam generator shall be served by District approved casing vent vapor control system #S-1129-63. [District Rule 2201]
- 13. When oil firing, compliance source testing for NOx and fuel oil sulfur content shall be conducted annually (or as approved by the District). [District Rule 1070]
- 14. The sample collection shall be conducted under conditions (fuel quality, firing rate, vapor recovery gas incineration, air fuel ratio, etc.) expected to result in emissions representative of normal operation. [District Rule 1070]
- 15. The operational conditions during compliance testing may be imposed as permit requirements. [District Rule 2201]
- 16. Gas fired emission rates for permit unit shall not exceed PM10: 0.1135 lb/MMBtu, SOx (as SO2): 1.5231 lb/MMBtu, NOx (as NO2): 0.1800 lb/MMBtu, VOC: 0.0067 lb/MMBtu, and CO: 0.0333 lb/MMBtu. [District Rule 2201]
- 17. Oil fired emission rates for permit unit shall not exceed PM10: 0.1135 lb/MMBtu, SOx (as SO2): 1.5237 lb/MMBtu, NOx (as NO2): 0.3800 lb/MMBtu, VOC: 0.0067 lb/MMBtu, and CO: 0.0333 lb/MMBtu. [District Rule 2201]
- 18. The permittee shall maintain records of type and quantity of fuel burned (natural gas, 7W and 7E vapor recovery gas), sulfur content, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District Rule 2201]
- 19. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201]
- 20. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District Rule 2201]

- 21. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District Rule 2201]
- 22. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District Rule 2201]
- 23. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District Rule 2201]
- 24. Sufficient reference gas shall be available for continuous calibration of oxygen analyzer. [District Rule 2201]
- 25. This permit unit shall comply with NOx emission requirements as specified in Rule 4405. [District Rule 4405]
- 26. This permit unit shall comply with Sulfur Compound emission requirements as specified in Rule 4406. [District Rule 4406]
- 27. For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas flowrates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. [District Rule 2201]
- 28. For this unit overall oil fired throttle and use assessed in the SLC is 64%. [District Rule 2201]
- 29. Maximum daily emissions from all permit units in the Western Heavy Oil Source SLC Compliance Plan shall not exceed PM10: 595.24 lb/day; SOx (as SO2): 6248.41 lb/day; NOx (as NO2): 2431.17 lb/day; VOC: 63.17 lb/day; and CO: 306.49 lb/day. [District Rule 2201]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-57-7 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

27.5 MMBTU/HR GAS-FIRED NATIONAL STEAM GENERATOR (TX2-4173, DIS# 27557-66) WITH NORTH AMERICAN BURNER

- 1. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
- 2. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 5. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
- 6. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume until compliance with the sulfur limits can be demonstrated for 8 consecutive weeks for a fuel source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 7. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6, 6A, 6B, 6C or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 8. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 9. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2; 4305, 6.2.1; and 4351, 6.2.1], [Federally Enforceable Through Title V]
- 10. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2 and Kern County Rule 407], [Federally Enforceable Through Title V]

- 11. Sulfur compound emissions shall not exceed 0.11 lb of sulfur per million BTU of heat input, averaged over 3 one-hour periods. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; multiplying the reported sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by a combination of source testing for sulfur compounds and fuel analysis. Compliance may be demonstrated for this unit individually, or by showing that the total emissions of sulfur compounds from all steam generators located at the stationary source with ATC or PTO issued prior to September 12, 1979 does not exceed the emissions that would result if each unit was operating in compliance with the specified limit. [Kern County Rule 424; District Rules 2520, 9.3.2 and 4406], [Federally Enforceable Through Title V]
- 12. When this unit is not operated (dormant for Rule 4305) the fuel supply line shall be physically disconnected from this unit. [District Rule 2080]
- 13. Permittee shall notify the District at least seven (7) calendar days prior to recommencing operation. [District Rule 1070]
- 14. A source test to verify operation within the indicated emission limits shall be performed within 60 days of recommencing operation. [District NSR Rule], [Federally Enforceable Through Title V]
- 15. Emission rates shall not exceed PM10: 0.010 lb/MMBtu, SOx (as SO2): 0.001 lb/MMBtu nor 200 lb/hr, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, VOC: 0.003 lb/MMBtu, and CO: 48 ppmv @ 3% O2. [District Rules 4301, 4305, 4406 and NSR], [Federally Enforceable Through Title V]
- 16. Emissions assessed to the SLC for this unit are PM10: 3.9 lb/day, SOx (as SO2): 0.4 lb/day, NOx (as NO2): 13.9 lb/day, VOC: 1.2 lb/day, and CO: 13.5 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 17. Emission rates from all permit units in the Western Heavy Oil Source SLC Compliance Plan shall not exceed PM10: 289.5 lb/day, SOx (as SO2): 3,326.5 lb/day; NOx (as NO2): 302.0 lb/day, VOC: 33.8 lb/day, and CO: 175.9 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 18. Should source testing indicate an emission factor higher than that approved, the operator shall comply with District Rule 1100, Kern County Rule 111, and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District NSR Rule], [Federally Enforceable Through Title V]
- 19. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District NSR Rule], [Federally Enforceable Through Title V]
- 20. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]
- 21. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District NSR Rule], [Federally Enforceable Through Title V]
- 22. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District NSR Rule], [Federally Enforceable Through Title V]
- 23. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District NSR Rule], [Federally Enforceable Through Title V]
- 24. For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas flow rates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. [District NSR Rule], [Federally Enforceable Through Title V]
- 25. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District NSR Rule], [Federally Enforceable Through Title V]
- 26. After recommencing operation, source testing for NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 27. After recommencing operation, source testing for NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 28. After recommencing operation, if permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 29. The following conditions must be met for representative units to be used to test for NOx and CO emissions for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of heat input, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

- 30. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 31. An operating log shall be maintained for each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 32. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated such that in three years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 33. Should any of the representative units exceed the required emission limits of this permit, each of the unit in the group shall conduct emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.)

 [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 34. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081 and 4305], [Federally Enforceable Through Title V]
- 35. Emissions from this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (12/16/93), of three 30-minute test runs for NOx and CO. These means shall be multiplied by the appropriate factor to determine compliance with the emission limits. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]
- 36. Stack gas velocities for source test purposes shall be determined using EPA Method 2. [District Rule 1081], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-62-3 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

62.5 MMBTU/HR GAS-FIRED C.E. NATCO STEAM GENERATOR (TX2-6091; DIS# 4142-83) WITH NORTH AMERICAN BURNER. (SANTIAGO CREEK LEASE)

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% carbon dioxide). [District Rule 4301]
- 4. All combustion equipment equipment (burner, combustion air controls, etc.) shall be operated and maintained as intended by manufacturer. []
- All wells producing from strata steamed by this unit shall be connected to a District-approved emissions control system, have District-approved closed casing vents or be District-approved uncontrolled cyclic wells. [District Rule 4401]
- 6. This steam generator shall be fired exclusively on PUC-regulated natural gas or natural gas documented to be of comparable sulfur quality and TEOR non-condensible vapors. []
- 7. This steam generator is permitted to incinerate casing gas vapors from TEOR operation S-1129-130. []
- 8. This steam generator shall not operate in Sections 35 or 36, Township 31S, Range 22E when gas turbine engine S-1129-65 is in operation. []
- 9. When gas firing, compliance source testing for fuel gas sulfur content shall be conducted annually (or as approved by the District) within 60 days prior to the permit anniversary. [District Rule 1070]
- 10. The sample collection shall be conducted under conditions (fuel quality, firing rate, waste gas incineration, air fuel ratio, etc.) expected to result in emissions representative of normal operation. []
- 11. The operational conditions during compliance testing may be imposed as permit requirements. []
- 12. Should source testing indicate an emission factor higher than that approved, the operator shall comply with Rule 1100 and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District NSR Rule]
- 13. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District NSR Rule]
- 14. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule]
- 15. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District NSR Rule]
- 16. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District NSR Rule]
- 17. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District NSR Rule]
- 18. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District NSR Rule]
- 19. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District NSR Rule]
- 20. Sufficient reference gas shall be available for continuous calibration of oxygen analyzer. []
- 21. For the SLC, overall throttle and use factor for each unit shall be no greater than 64%. []

- 22. Maximum gas-fired emission rates shall not exceed PM10: 0.0100 lb/MMBtu; SOx (as SO2): 0.0067 lb/MMBtu; SOx (as SO4): 0.0005 lb/MMBtu; NOx (as NO2): 0.1080 lb/MMBtu; VOC: 0.0030 lb/MMBtu; and CO: 0.0070 lb/MMBtu. []
- 23. Total combined emissions for all units subject to SLC plan shall not exceed PM10: 1,448.23 lb/day; SOx (as SO2): 12,230.23 lb/day; SOx (as SO4): 504.57 lb/day; NOx (as NO2): 9,146.23 lb/day; VOC: 181.73 lb day; and CO: 1,073.16 lb/day. []
- 24. For units equipped with continuous emissions monitors (CEMs), CEM records shall be used in place of calculated emissions. [District NSR Rule]
- 25. If on any day CEM or fuel use determinations fail, Texaco EPI shall meet the requirements of Rule 1100 as specified for CEM's. []
- 26. For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas flowrates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-80-4 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

DORMANT 27.5 MMBTU/HR C.E. NATCO GAS-FIRED STEAM GENERATOR (HSG-#59; DIS# 20764-66) WITH NORTH AMERICAN BURNER. (ALSO AUTHORIZED TO OPERATE AT SW20-T30S-R22E)

- 1 This permit unit shall not be operated unless the owner or operator applies to modify the Title V permit to address the requirements of District Rule 2520, section 9.0 for this permit unit. [District Rule 2520, 9.0], [Federally Enforceable Through Title V]
- 2. This equipment shall not be operated for any reason until necessary retrofits are made to comply with the applicable requirements of District Rule 4305. [District NSR Rule], [Federally Enforceable Through Title V]
- 3. No modification(s) to this unit shall be performed without an Authority to Construct for the modification(s), except for changes specified in condition 4 below. [District NSR Rule], [Federally Enforceable Through Title V]
- 4. The fuel supply line shall be physically disconnected from this unit. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. Emissions from this unit shall not exceed any of the following: NOx (as NO2): 30 ppmv @ 3% O2; or CO: 400 ppmv @ 3% O2. [District Rule 4305]
- 6. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District NSR Rule]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-81-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

25.2 MMBTU/HR NATIONAL GAS-FIRED STEAM GENERATOR (HSG-#3970) WITH NORTH AMERICAN BURNER. (MULTIPLE LOCATIONS) - SOLD TO ? PER TEPI 6/11/97 LMS 7/7/97

- 1. Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% carbon dioxide). [District Rule 4301]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District Rule 2080]
- 4. All combustion equipment (burner, combustion air controls, etc.) shall be operated and maintained as intended by manufacturer. [District Rule 2080]
- 5. All wells producing from strata steamed by this unit shall be connected to a District approved emissions control system, have District approved closed casing vents, or be District approved uncontrolled cyclic wells. [District Rule 2080]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-82-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

DORMANT 27.5 MMBTU/HR STRUTHERS GAS-FIRED STEAM GENERATOR (HSG-#34; DIS# 27201-66) WITH NORTH AMERICAN BURNER. (WESTSIDE)

- This permit unit shall not be operated unless the owner or operator applies to modify the Title V permit to address the requirements of District Rule 2520, section 9.0 for this permit unit. [District Rule 2520, 9.0], [Federally Enforceable Through Title V]
- 2. This equipment shall not be operated for any reason until necessary retrofits are made to comply with the applicable requirements of District Rule 4305. [District NSR Rule], [Federally Enforceable Through Title V]
- 3. No modification(s) to this unit shall be performed without an Authority to Construct for the modification(s), except for changes specified in condition 4 below. [District NSR Rule], [Federally Enforceable Through Title V]
- 4. The fuel supply line shall be physically disconnected from this unit. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. Emissions from this unit shall not exceed any of the following: NOx (as NO2): 30 ppmv @ 3% O2; or CO: 400 ppmv @ 3% O2. [District Rule 4305]
- 6. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District NSR Rule]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-101-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

DIATOMITE PILOT PLANT ORE RECEIVING CRUSHING & STORAGE & LOADING OPERATION. (DIATOMITE) ***RELINQUISHED PER 2/28/95 LETTER MPE

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 4. Operation shall include receiving hopper with grizzly and automatic electrostatic fogger dust suppression system, two conveyors with automatic electrostatic fogger dust suppression system at transfer and discharge point. []
- 5. Operation shall include crusher conveyor with feed conveyor having enclosed hood extending to crusher feed opening, crusher with discharge hood, enclosed bucket elevator, two closed ore storage bins & vibrating screen separator. []
- 6. Equipment listed in condition (5) above shall be vented to shared fabric collector. []
- 7. Electrostatic fogger dust suppression systems shall be electrically interlocked with conveyor activation switch. []
- 8. Stocking conveyor telescoping discharge chute shall be adjusted to storage pile height when in operation. []
- 9. Vibrating screen separator shall have tight cover and tight, untorn boots at point of input and discharge. []
- 10. Crusher inspection doors and shaft scales shall be dust-tight. []
- 11. Fabric collector exhaust blower activation switch shall be electrically interlocked with crusher activation switch. []
- 12. All open-ended lines shall be plugged or capped. []
- 13. Process drains and sewers shall be vapor-tight under normal operating conditions and shall only be used during startups or breakdown conditions pursuant to Rules 1100 and 2092. []
- 14. Lurgi and Dravo pilot plants shall not be operated simultaneously and pilot plant not in operation shall be depressurized in accordance with Rule 4454 requirements, with all stored solvent and/or oil removed while other pilot is in operation. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-102-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

DIATOMITE PILOT PLANT (LURGI) LIME RECEIVING AND STORAGE OPERATION INCLUDING LIME STORAGE BIN WITH STEAM HEATING COILS AND BIN VENT FABRIC COLLECTOR. (DIATOMITE) ***RELINQUISHED PER 2/28/95 LETTER MPE

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 4. Lime storage bin and pneumatic fill system shall vent only through fabric collector. []
- 5. Fabric collector cleaning mechanism shall be activated subsequent to each transfer of material into lime storage bin. []
- 6. Lurgi & Dravo pilot plants shall not be operated simultaneously, and pilot plant not in operation shall be depressurized in accordance with Rule 4454 requirements, with all stored solvents and/or oil removed while other pilot plant is in operation. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-103-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

DIATOMITE PILOT PLANT (LURGI) DRYING, RETORTING, CONDENSING AND STRIPPING OPERATION. (DIATOMITE)
***RELINQUISHED PER 2/28/95 LETTER MPE

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 4. Operation shall include one conveyor, dryer feed bin with vent filter, enclosed rotary dryer, dried ore conveyor, pre-dried feed bin with fabric collector and covered auger. []
- 5. Operation shall include rector with mixer, surge bin combustor, lift pipe collecting bin & three process cyclonic separators, waste gas combustor, after combustor, three heat exchangers, electrostatic precipitator & eductor type venturi scrubber. []
- 6. Operation shall include fluidized bed dryer exchanging to process cyclonic separator and after-combustor, two residue augers, gas liquor steam stripper venting to process cyclonic separator and after combustor. []
- 7. Operation shall include stripper feed/effluent heat exchanger, residue cooler/mixer vented to process cyclonic separator and fluid bed dryer, five blowers, three oil washer, three washed-oil surge drums and three process cyclonic separators. []
- 8. Operation shall include condensate separator drum vented to waste gas combustor or after-combustor, three water coolers, and ten hydrocarbon pumps. []
- 9. Dryer feed bin shall vent only to fabric collector. []
- 10. Rotary dryer shall have no air contaminant emissions. []
- 11. Pre-dried feed bin shall vent only to fabric collector. []
- 12. Scrubber liquor pH shall be maintained no lower than 7. []
- 13. Gases shall not be emitted without passing through electrostatic precipitator & venturi scrubber except during startup/shutdown or breakdown conditions aggregating less than 1 hr/day during which time the gases are incinerated in thermal oxidizer. []
- 14. Process drains and sewers shall be vapor tight. []
- 15. All valves, flanges, fittings and seal shall be maintained in leak free condition. []
- 16. Spent residue handling and storage shall be accomplished with no visible emissions. []
- 17. Residue pile shall not be source of hydrocarbon or particulate matter emissions. []
- 18. Lurgi & Dravo pilot plants shall not be operated simultaneously & pilot plant not in operation shall be depressurized in accordance with Rule 4454, with all stored solvents and/or oil removed while other pilot plant is in operation. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-104-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

DIATOMITE PILOT PLANT (LURGI) DEDUSTING & DISTILLATION OPERATION. (DIATOMITE) ***RELINQUISHED PER

2/28/95 LETTER MPE

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 4. Operation shall include two nozzle separators with four hydrocarbon surge tanks, heat exchanger and four hydrocarbon pumps, solidizer dryer vented to process solidizer collector, two heat exchangers and hydrocarbon blower. []
- 5. Operation shall include distillation column with feed bottoms heat exchanger, overheads condenser, overheads accumulator drum, two hydrocarbon pumps and distillation operation heater. []
- 6. Fuel consumption shall not exceed 115 gal/day. []
- 7. Fuel oil sulfur content shall not exceed 0.25% by weight. []
- 8. Process drains and sewers shall be vapor-tight. []
- 9. All valves, flanges, fittings and seals shall be maintained in a leak- free condition. []
- 10. Lurgi & Dravo pilot plants shall not be operated simultaneously, and pilot plant not in operation shall be depressurized in accordance with Rule 4454 requirements, with all stored solvents and/or oil removed while other pilot plant is in operation. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-105-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

DIATOMITE PILOT PLANT (LURGI) THERMAL OXIDIZER. (DIATOMITE) ***RELINQUISHED PER 2/28/95 LETTER MPE

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 4. Operation shall include steam-assisted, propane pilot thermal oxidizer and gas piping from retort process after-combustor flue to be used only during start-up shutdown or breakdown conditions. []
- 5. Operation shall include Ametek venturi scrubber with recirculation tank, pH controller, and pump and TXT additive injection pump. []
- 6. Thermal oxidizer shall not smoke. []
- 7. Gas flowrate to scrubber shall not exceed 174,000 scfd. []
- 8. Thermal oxidizer inlet gas sulfur compound concentration shall not exceed 0.29% by volume. []
- 9. Scrubber inlet H2S concentration shall not exceed 2.4% by volume. []
- 10. Recirculation liquor pH shall be maintained at no less than 8.0 and be continuously regulated with fresh caustic by pH controller. []
- 11. Scrubber gas shall be vented only to thermal oxidizer. []
- 12. Scrubber blowdown shall be piped to gas liquor stripper (S-1129-103) or trucked to approved hazardous waste disposal dumpsites. []
- 13. Lurgi & Dravo pilot plants shall not be operated simultaneously, and pilot plant not in operation shall be depressurized in accordance with Rule 4454, with all stored solvents and/or oil removed while other pilot plant is in operation. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-106-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

DIATOMITE PILOT PLANT (LURGI) RETORTED HEAVY OIL STORAGE & LOADING OPERATION INCLUDING FIXED-ROOF STORAGE TANK WITH INTERNAL STEAM COILS, PUMP AND FOUR INCH DIAMETER BOTTOM LOADING HOSE. (DIATOMITE) ***RELINQUISHED PER 2/28/95 LETTER MPE

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. True vapor pressure of material stored shall not exceed 1.5 psia. []
- 3. All valves, flanges, fittings and seals shall be maintained in leak free condition (less than 10,000 ppmv). []
- 4. Record of tank throughput, storage temperature and true vapor pressure shall be maintained and shall be made available for District inspection upon request. []
- 5. Lurgi & Dravo pilot plants shall not be operated simultaneously, and pilot plant not in operation shall be pressurized in accordance with Rule 4454, with all stored solvent and/or oil removed while other pilot plant is in operation. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-107-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

DIATOMITE PILOT PLANT (LURGI) RETORTED MIDDLE OIL STORAGE & LOADING OPERATION INCLUDING FIXED-ROOF STORAGE TANK, PUMP, BLOW METER, AND FOUR INCH DIAMETER FLEXIBLE BOTTOM LOADING LINE. (DIATOMITE)***RELINQUISHED PER 2/28/95 LETTER MPE

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. True vapor pressure of material stored shall not exceed 1.5 psia. []
- 3. All valves, flanges, fittings and seals shall be maintained in a leak free condition (less than 10,000 ppmv). []
- 4. Record of tank throughput, storage temperature and vapor pressure shall be maintained and shall be made available for District inspection upon request. []
- 5. Lurgi & Dravo pilot plants shall not be operated simultaneously, and pilot plant not in operation shall be depressurized in accordance with Rule 4454 requirements, with all stored solvent and/or oil removed while other pilot plant is in operation. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-108-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

DIATOMITE PILOT PLANT (DRAVO) BOILER/FUME INCINERATOR INCLUDING ONE 12.5 MMBTU/HR OIL-FIRED BOILER, RECORDING FUEL FLOW METER, AND WASTE GAS PIPING FROM VENT HEATER TO BOILER FIREBOX **RELINQUISHED PER 2/28/95 LETTER MPE

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 4. Main burner to have exclusively PUC regulated natural gas fuel firing capability. []
- 5. Waste gas incinerated in boiler/fume burner shall not contain hydrogen sulfide. []
- 6. Boiler/fume burner shall be utilized to incinerate all vapors generated from the storage, handling and processing of solvent. []
- 7. Copies of design details of boiler burner, stack, waste gas introduction method and monitors shall be submitted to the District as soon as the vendors are selected prior to installation. []
- 8. Copies of design details of boiler burner, stack, waste gas introduction method and monitors shall be submitted to the District once vendors are selected and prior to installation. []
- 9. All open-ended lines shall be plugged or capped. []
- 10. Process drains and sewers shall be vapor tight under normal operating conditions and shall only be used during start-up or breakdown conditions pursuant to Rules 1100 and 2092. []
- 11. Fugitive VOC emissions from valves shall not exceed 5000 ppmv above background when measured at a distance of 1 cm from the source. [
- 12. Fugitive VOC emissions from flanges, connectors, and pressure relief valves shall not exceed Rule 4451 leak-rate criteria (10,000 ppmv @ 1 cm). []
- 13. Fugitive VOC emissions from seals on pumps and compressors shall not exceed Rule 4452 leak rate criteria (10,000 ppmv @ 1 cm). []
- 14. The permittee shall comply with all inspection, maintenance and recordkeeping requirements of Rule 4451 and 4452. []
- 15. Compliance with leak-rate limits for fugitive VOC emission sources shall be verified using test methods specified in Rules 4451 & 4452. []
- 16. Maximum number of valves in service at any time for entire Dravo operation shall not exceed: valves (gas/vapor service) = 49; valves (light hydrocarbon liquid service) = 1285; valves (heavy hydrocarbon liquid service) = 242. []
- 17. Maximum number of pressure relief valves and flanges in service at any time for entire Dravo operation shall not exceed: pressure relief valves (all hydrocarbon streams) = 14; flanges (all hydrocarbon streams) = 8. []
- 18. Maximum number of pumps & blowers in service at any time for entire Dravo operation shall not exceed: pumps (single seals) = 6; pumps (double seals w/ mineral oil barrier) = 60; blowers (all streams) = 1; open ended lines (all streams) = 0. []
- 19. Lurgi and Dravo pilot plant shall not operate until applications are approved that will rectify exceedance of Rule 2201 (3C) NSR limits for SO2 emissions. []
- 20. Lurgi and Dravo pilot plants shall not be operated simultaneously, and pilot plant not in operation shall be depressurized in accordance with Rule 4454, with all stored solvent and/or oil removed while other pilot plant is operating. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-109-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

DIATOMITE PILOT PLANT OIL/WATER SEPARATOR INCLUDING CORRUGATED- PLATE OIL/WATER SEPARATOR SERVING BOTH LURGI AND DRAVO PLANTS, AND CONTAMINATED WATER STORAGE POND. (DIATOMITE)
***RELINQUISHED PER 2/28/95 LETTER MPE

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Collected oil to be piped to process or to tankage without atmospheric vents. []
- 3. Oil/water separators operation pressure relief valve shall be inspected for leaks monthly with a combustible gas analyzer. []
- 4. All open-ended lines shall be plugged or capped. []
- 5. Process drains and sewers shall be vapor-tight under normal operating conditions and shall only be used during start-up or breakdown conditions pursuant to Rule 4623. []
- 6. Lurgi and Dravo pilot plants shall not be operated simultaneously and pilot plant not in operation shall be depressurized in accordance with Rule 4454 with all stored solvents and/or oil removed while other pilot plant is in operation. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-111-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

12,000 GALLON UNDERGROUND GASOLINE STORAGE TANK SERVED BY PHASE I VAPOR RECOVERY SYSTEM (G-70-97) AND TWO (2) NOZZLES SERVED BY PHASE II VAPOR RECOVERY SYSTEM (G-70-52). (MCKITTRICK YARD)

- 1. All nozzles shall be equipped with coaxial hose configurations. [District Rule 4622]
- 2. The vapor recovery systems and their components shall be installed, operated, and maintained in accordance with the State certification requirements. [District Rules 4621 and 4622]
- 3. Each vapor recovery system shall be tested to determine proper function using District approved test methods at least once every five years. [District Rule 4622]
- 4. The District shall be notified by the permittee 15 days prior to each test. The test results shall be submitted to the District no later than 30 days after each test. [District Rule 1081]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-112-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

5.4 MMBTU/HR GAS-FIRED HEATER TREATER WITH THREE BURNERS EACH RATED AT 1.8 MMBTU/HR - NORTH MIDWAY

- 1. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081, and Kern County Rule 108.1], [Federally Enforceable Through Title V]
- 2. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. Firing on PUC or FERC quality natural gas shall demonstrate compliance with this requirement. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 5. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
- 6. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume until compliance with the sulfur limits can be demonstrated for 8 consecutive weeks for a fuel source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 7. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6, 6A, 6B, 6C or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 8. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 9. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 10. Excess combustion air shall be maintained at no less than 10% unless continuous operation oxygen analyzer/controller is utilized. [District Rule 2080], [Federally Enforceable Through Title V]
- 11. Heater treater shall be fired exclusively on natural gas or LPG and shall have no provisions for firing on fuel oil. [District Rules 2080 and 4301, 5.2.2], [Federally Enforceable Through Title V]
- 12. Permittee shall maintain records of fuel hhv, monthly fuel use, and cumulative annual fuel use for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-113-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

3.6 MMBTU/HR GAS-FIRED HEATER TREATER WITH TWO BURNERS EACH RATED AT 1.8 MMBTU/HR - NORTH MIDWAY

- 1. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081, and Kern County Rule 108.1], [Federally Enforceable Through Title V]
- 2. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. Firing on PUC or FERC quality natural gas shall demonstrate compliance with this requirement. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 5. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
- 6. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume until compliance with the sulfur limits can be demonstrated for 8 consecutive weeks for a fuel source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 7. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6, 6A, 6B, 6C or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 8. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 9. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 10. Excess combustion air shall be maintained at no less than 10% unless continuous operation oxygen analyzer/controller is utilized. [District Rule 2080], [Federally Enforceable Through Title V]
- 11. Heater treater shall be fired exclusively on natural gas or LPG and shall have no provisions for firing on fuel oil. [District Rules 2080 and 4301, 5.2.2], [Federally Enforceable Through Title V]
- 12. Permittee shall maintain records of fuel hhv, monthly fuel use, and cumulative annual fuel use for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-114-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

9.0 MMBTU/HR GAS-FIRED HEATER TREATER WITH TWO BURNERS EACH RATED AT 4.5 MMBTU/HR - NORTH MIDWAY

- 1. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081, and Kern County Rule 108.1], [Federally Enforceable Through Title V]
- 2. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. Firing on PUC or FERC quality natural gas shall demonstrate compliance with this requirement. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 5. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
- 6. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume until compliance with the sulfur limits can be demonstrated for 8 consecutive weeks for a fuel source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 7. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6, 6A, 6B, 6C or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 8. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 9. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 10. Excess combustion air shall be maintained at no less than 10% unless continuous operation oxygen analyzer/controller is utilized. [District Rule 2080], [Federally Enforceable Through Title V]
- 11. Heater treater shall be fired exclusively on natural gas or LPG and shall have no provisions for firing on fuel oil. [District Rules 2080 and 4301, 5.2.2], [Federally Enforceable Through Title V]
- 12. Permittee shall maintain records of fuel hhv, monthly fuel use, and cumulative annual fuel use for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-115-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

7.4 MMBTU/HR GAS-FIRED HEATER TREATER WITH THREE BURNERS EACH RATED AT 1.8 MMBTU/HR AND ONE BURNER RATED AT 2.0 MMBTU/HR - NORTH MIDWAY

- 1. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081, and Kern County Rule 108.1], [Federally Enforceable Through Title V]
- 2. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. Firing on PUC or FERC quality natural gas shall demonstrate compliance with this requirement. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 5. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
- 6. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume until compliance with the sulfur limits can be demonstrated for 8 consecutive weeks for a fuel source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 7. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6, 6A, 6B, 6C or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 8. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 9. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 10. Excess combustion air shall be maintained at no less than 10% unless continuous operation oxygen analyzer/controller is utilized. [District Rule 2080], [Federally Enforceable Through Title V]
- 11. Heater treater shall be fired exclusively on natural gas or LPG and shall have no provisions for firing on fuel oil. [District Rules 2080 and 4301, 5.2.2], [Federally Enforceable Through Title V]
- 12. Permittee shall maintain records of fuel hhv, monthly fuel use, and cumulative annual fuel use for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-116-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

5.0 MMBTU/HR GAS-FIRED HEATER TREATER. CANCELLED FOR ERC S-357 6/13/96 GAU.

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration (calculated to 12% Carbon Dioxide). []
- 4. Sulfur compounds emission rate shall not exceed 0.2% by volume (2000 ppmv). []
- 5. Excess combustion air shall be maintained at no less than 10% unless continuous operation oxygen analyzer/controller is utilized. []
- 6. Heater treater shall be fired exclusively on natural gas or LPG and shall have no provisions for firing on fuel oil. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-117-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

12.0 MMBTU/HR GAS-FIRED HEATER TREATER. CANCELLED FOR ERC S-357 6/13/96 GAU.

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration (calculated to 12% Carbon Dioxide). []
- 4. Sulfur compounds emission rate shall not exceed 0.2% by volume (2000 ppmv). []
- 5. Excess combustion air shall be maintained at no less than 10% unless continuous operation oxygen analyzer/controller is utilized. []
- 6. Heater treater shall be fired exclusively on natural gas or LPG and shall have no provisions for firing on fuel oil. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-118-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

12.0 MMBTU/HR GAS-FIRED HEATER TREATER. CANCELLED FOR ERC S-357 6/13/96 GAU.

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration (calculated to 12% Carbon Dioxide). []
- 4. Sulfur compounds emission rate shall not exceed 0.2% by volume (2000 ppmv). []
- 5. Excess combustion air shall be maintained at no less than 10% unless continuous operation oxygen analyzer/controller is utilized. []
- 6. Heater treater shall be fired exclusively on natural gas or LPG and shall have no provisions for firing on fuel oil. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-125-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

5.0 MMBTU/HR GAS-FIRED HEATER TREATER - CANCELED BY TEPI 6/11/97 LMS 7/7/97

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration (calculated to 12% Carbon Dioxide). []
- 4. Sulfur compounds emission rate shall not exceed 0.2% by volume (2000 ppmv). []
- 5. Excess combustion air shall be maintained at no less than 10% unless continuous operation oxygen analyzer/controller is utilized. []
- 6. Heater treater shall be fired exclusively on natural gas or LPG and shall have no provisions for firing on fuel oil. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-128-12 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

TEOR SYSTEM SERVING 95 WELLS WITH CLOSED CASING VENTS WHEN PRODUCED FLUIDS GOING TO VAPOR CONTROLLED TANKAGE INCLUDING TWO GAS/LIQUID SEPARATORS, FIN FAN HEAT EXCHANGER, AND COMPRESSOR-IMPLEMENTED IN ERROR, PTO TRANSFERRED TO S-1141-409 (MSL 2/23/99)

- 1. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing collection system and shall make such listing readily available for District inspection upon request. [District Rule 2201]
- 2. Operation shall include vapor piping to existing dual-fired generators S-1141-391-0, '392-0, '398-0 and '400-0. [District Rule 2201]
- 3. Total uncontrolled VOC emissions from all well vents shall be reduced by at least 99%. [District Rule 4401]
- 4. VOC containing vapors shall not be vented to the atmosphere. [District Rule 2201]
- 5. Well casing vents or downstream valves may be closed if the well is producing to tanks equipped with a vapor control system achieving 99% VOC control or if the well is idle. [District Rule 2201]
- 6. Volatile organic compound (VOC) emissions from entire system shall not exceed 241.9 lb per day. [District Rule 2201]
- 7. Condensate shall be mixed with produced fluids and piped only to the Section 36 production dehy facility equipped with vapor control. [District Rule 2201]
- 8. Components shall be maintained and leaks shall be repaired as specified in Rule 4401. [District Rule 4401]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-131-5 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

THERMALLY ENHANCED OIL RECOVERY OPERATION SERVING 146 WELLS, WITH VAPOR RECOVERY SHARED WITH S-1129-857, & INCLUDING G/L SEPARATOR, WATER-COOLED HEAT EXCHANGER, FIN-FANS, HEAT EXCHANGERS, & 20'VERTICAL AIR-ASSIST FLARE **TRANSFERRED TO S 1547-1063**

- 1. Final vapor condenser shall utilize exhaust gas temperature indicator. [District Rule 2201]
- 2. Vapors from condenser shall be incinerated in flare. [District Rule 2201]
- 3. Non-methane hydrocarbon collection efficiency of entire system shall be maintained at no less than 99.0% by weight. [District Rule 2201]
- 4. Condensate holding tank shall be equipped with pressure/vacuum relief valve(s). [District Rule 2201]
- 5. Condensate shall discharge only to existing crude oil production tank. [District Rule 2201]
- 6. Total number of leaks from the well vent vapor control system, including condensate handling, shall not exceed the number of allowable leaks required by Rule 4401 at any one time. [District Rule 4401]
- 7. Leaks shall be marked and repaired as specified in Rule 4401. [District Rule 4401]
- 8. Entire system volatile organic compound (VOC) emissions shall include emissions from fin-fan coolers exhaust, condensate holding tank and production tanks used to store the condensate (condensate contribution). [District Rule 2201]
- Volatile organic compound (VOC) emissions from entire system (including fugitive emissions) shall not exceed 1,054.8 lb per day. [District Rule 2201]
- 10. H2S concentration prior to incineration in flare shall not exceed 0.2% by volume (2,000 ppmv). [District Rule 2201]
- 11. Emissions from the flare shall not exceed the following: NOx 11.0 lb day, CO: 6.0 lb/day, and SOx: 337.3 lb/day. [District Rule 2201]
- 12. Compliance with H2S concentration shall be demonstrated by District witnessed sample collections by independent testing laboratory annually (or as approved by the District). [District Rule 2201]
- 13. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-132-3 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

6,700 BBL FIXED ROOF CONSTANT LEVEL CRUDE OIL WASH TANK **TRANSFERRED TO S-1547-1064, HAR 10/25/99**

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. True vapor pressure (TVP) of any liquids placed, stored, or held in the tank shall not exceed 1.5 psia at storage temperature. [District Rule 4623]
- 3. Temperature of liquid stored shall not exceed 180 degrees F. [District NSR Rule]
- 4. Tank shall operate at a constant liquid level. [District NSR Rule]
- 5. Permittee shall maintain accurate monthly records of storage temperature and annual sampling of RVP. [District Rule 1070]
- 6. Records shall be maintained for a period of two years and made readily available for District inspection upon request. [District Rule 1070]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-136-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, FUEL OIL TANK #1.

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-138-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

11,130 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, STA. #2. ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-153-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

31,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #75GM2. *** SOLD ***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-154-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #2088.

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-155-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #1758.

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-156-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

31,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK.

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-157-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

8,400 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK.

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-158-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #1841.

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-159-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #1357.

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-160-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

84,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #2834.

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-161-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

84,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK 10011 **PTO SURRENDERED AS REQUIRED BY ATC S-1129-824-0 5/16 96, KCM**

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-162-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

84,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK 1461. **PTO SURRENDERED AS REQUIRED BY ATC S-1129-825-0 5/16 96, KCM**

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-163-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

10,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #25GL3. - SOLD TO ? PER 1997 BILL LMS 12/29/97

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-164-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOFCRUDE OIL PRODUCTION TANK #5X1567. - SOLD TO ? TO 1997 BILL LMS 12/29/97

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-173-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

63,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #1.5 GM. - SOLD TO ? PER 1997 BILL LMS 12/29/97

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-175-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

10,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, GAUGE TANK. - SOLD TO ? PER 1997 BILL LMS 12/29/97

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-177-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

126,000 GALLON FIXED CRUDE OIL PRODUCTION TANK #3GM2. - SOLD TO ? PER 1997 BILL LMS 12/29/97

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-178-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

4,200 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, GAUGE TANK.

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-179-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

63,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #175.

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-180-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

10,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, DRAIN TANK.

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-183-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK WITH UPSTREAM FIN-FAN COOLER (MCKITTRICK FEE)

PERMIT UNIT REQUIREMENTS

1. True Vapor Pressure (TVP) of liquids stored shall not exceed 1.5 psi. [District Rule 4623]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-204-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

250 BARREL (10,500 GALLON) FIXED ROOF PETROLEUM STORAGE (GAUGE) TANK. (MCKITTRICK FEE)

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-205-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

10,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, PROD. TANK.

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-206-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

42,000 GALLON CRUDE OIL TRANSFER TANK (7 WEST FACILITY) WITH VAPOR CONTROL SYSTEM SHARED WITH S-1129-207

- 1. Vapor control system vapor piping shall discharge only to steam generator S-1129-56 and 7 East flare S-1129-831. [District Rule 2201]
- 2. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201]
- 3. The tank shall be equipped with a vapor recovery system capable of reducing VOC emissions by at least 98%. [District Rule 2201]
- 4. A leak is any emission greater than 10,000 ppm above background measured at a distance of one centimeter from the potential source with a portable hydrocarbon detection instrument calibrated with methane. [District Rule 2201]
- 5. Tank roof appurtenances shall be maintained leak free. [District Rule 2201]
- 6. Tank gauging, sampling devices, relief valves, manholes and etc. shall be equipped with leak free gaskets and shall remain closed at all times except during gauging or sampling. [District Rule 2201]
- 7. Piping, valves, fittings, pumps, compressors, liquid knockouts, condensate pressure vessels, etc. shall be inspected and the total number of leaks for equipment included on S-1129-206 and '207 shall not exceed 4 at any one time. [District Rule 2201]
- 8. Leaks shall be repaired within 15 days. [District Rule 2201]
- 9. True vapor pressure (TVP) of liquid stored shall not exceed 1.5 psia. [District Rule 2201]
- 10. Testing for true vapor pressure shall be conducted at least annually. [District Rule 1081]
- 11. Vapor recovery gas shall be incinerated in steam generator S-1129-56 or 7 East flare S-1129-831. [District Rule 2201]
- 12. Vapor recovery gas combusted in 7 East flare S-1129-831 shall be routed to H2S scrubber prior to combustion. [District Rule 2201]
- 13. Permittee shall maintain accurate records of tank throughput, true vapor pressure and temperature of petroleum liquids in the tank, and such records shall be made readily available for District inspection upon request for a period of two years. [District Rule 2201]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-207-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

10,500 GALLON CRUDE OIL GAUGE TANK (7 WEST FACILITY) WITH VAPOR CONTROL SYSTEM SHARED WITH S-1129-206

- 1. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201]
- 2. The tank shall be equipped with a vapor recovery system capable of reducing VOC emissions by at least 98%. [District Rule 2201]
- 3. A leak is any emission greater than 10,000 ppm above background measured at a distance of one centimeter from the potential source with a portable hydrocarbon detection instrument calibrated with methane. [District Rule 2201]
- 4. Tank roof appurtenances shall be maintained leak free. [District Rule 2201]
- 5. Tank gauging, sampling devices, relief valves, manholes and etc. shall be equipped with leak free gaskets and shall remain closed at all times except during gauging or sampling. [District Rule 2201]
- 6. Piping, valves, fittings, pumps, compressors, liquid knockouts, condensate pressure vessels, etc. shall be inspected and the total number of leaks for equipment included on S-1129-206 and '207 shall not exceed 4 at any one time. [District Rule 2201]
- 7. Leaks shall be repaired within 15 days. [District Rule 2201]
- 8. True vapor pressure (TVP) of liquid stored shall not exceed 1.5 psia. [District Rule 2201]
- 9. Testing for true vapor pressure shall be conducted at least annually. [District Rule 1081]
- 10. Permittee shall maintain accurate records of tank throughput, true vapor pressure and temperature of petroleum liquids in the tank, and such records shall be made readily available for District inspection upon request for a period of two years. [District Rule 2201]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-208-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

10,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK.

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-209-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK. ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-210-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #0.5GM18.

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-211-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #0.5GM19.

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-212-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

10,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, STA. 19 GAUGE TANK.

- 1. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 2. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-213-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

10,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK.

PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-214-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

31,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, SALT CREEK UNIT

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-215-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, STA. 6 DRAIN TANK. ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-216-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

10,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, STA.6 DRAIN TANK.

PERMIT UNIT REQUIREMENTS

1. See facility wide requirements for requirements applicable to this permit unit. [District Rule 2080]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-217-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

420,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK. ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-218-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

10,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, STOCK TANK.

PERMIT UNIT REQUIREMENTS

1. See facility wide requirements for requirements applicable to this permit unit. [District Rule 2080]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-220-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

420,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #10GM4 STA. L.

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-221-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

210,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #5GM4 STA. L.

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-222-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

8,400 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #0.2GM1 STA. L.(CANCELLED BY PERMITTEE 3/1/97 - OUT OF SERVICE, TEG 5/15/97)

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-223-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

420,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #10GM3 STA. L.

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-224-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #0.5GM1, CENTRAL MICKETTRICK FEE FACILITY (SEC. SW6, T30S, R22E).

PERMIT UNIT REQUIREMENTS

1. True Vapor Pressure (TVP) of liquids stored shall not exceed 1.5 psi. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-225-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

420,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #10GM5 STA. L.

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-226-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

420,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #10GM1 STA. L.

PERMIT UNIT REQUIREMENTS

1. See facility wide requirements for requirements applicable to this permit unit. [District Rule 2080]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-227-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

100,800 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #2.4GM7 STA. L.

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-228-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

126,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #3GM3 STA. L.

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-229-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

126,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #3GM4 STA. L.

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-230-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

10,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, STA.22 GAUGE TANK.

- 1. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 2. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-234-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

4,200 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK. ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-235-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

4,200 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK. ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-236-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

10,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, GAUGE TANK. ***RELINQUISHED PER 2/28/95

LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-237-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK. ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-239-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

10,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #2X816. ***RELINQUISHED PER 2/28/95 LETTER

MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-240-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

10,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, STA. 30 GAUGE TANK.

PERMIT UNIT REQUIREMENTS

1. See facility wide requirements for requirements applicable to this permit unit. [District Rule 2080]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-244-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

1500 BBL FIXED ROOF STORAGE TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-247-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, STOCK TANK.

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-252-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

63,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, SHIP TANK.

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-253-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, STOCK TANK.

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-254-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, STOCK TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-268-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, STOCK TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-270-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

8,400 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, STA. 3 GAUGE TANK

- 1. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 2. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-271-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON CRUDE OIL PRODUCTION TANK, WASH TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-272-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, WASH TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-273-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, FAMILIY TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-274-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

8,400 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, STA. 2 GAUGE TANK

- 1. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 2. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-275-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

126,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, STA. 1 T-5 WASH TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-276-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

7,700 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK

- 1. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 2. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-277-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, DRAIN TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-278-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

126,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, REJECT TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-279-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, WASH TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-280-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

126,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, LACT TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-281-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

12,600 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, SKIM TANK

- 1. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 2. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from the heavy oil source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-284-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-285-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, GENERATOR FUEL TANK ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-286-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

31,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, SKIM/DRAIN TANK ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-287-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

31,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-288-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

31,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-289-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

210,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-290-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

210,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-291-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

105,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-292-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

63,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-293-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

63,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #1.5GF5 ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-294-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

8,400 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, SKIM TANK RELINQUISHED PER 2/28/95 LETTER

MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-295-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

126,000 GALLON CRUDE OIL PRODUCTION TANK, WASH TANK ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-296-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, WASH TANK ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-297-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, LACT TANK

PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-298-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

84,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, SHIP TANK ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-299-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, SHIP TANK WITH UPSTREAM FIN-FAN COOLER (MCKITTRICK FEE)

PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-313-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK

PERMIT UNIT REQUIREMENTS

1. See facility wide requirements for requirements applicable to this permit unit. [District Rule 2080]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-314-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

31,500 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK

PERMIT UNIT REQUIREMENTS

1. See facility wide requirements for requirements applicable to this permit unit. [District Rule 2080]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-322-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK 05GF5

*** SURRENDERED BY PERMITTEE -

7/24/95 DMR ***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-327-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

49,999 GALLONS FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. See facility wide requirements for requirements applicable to this permit unit. [District Rule 2080]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-332-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #1GF57

PERMIT UNIT REQUIREMENTS

1. See facility wide requirements for requirements applicable to this permit unit. [District Rule 2080]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-333-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK 1GF56

*** SOLD TO MCFARLAND ENERGY ***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-338-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

126,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, WASH TANK CANCELLED BY PERMITTEE 3/1/97 - OUT OF SERVICE, TEG 5/15/97)

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-339-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

105,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #25GF2 CANCELLED BY PERMITTEE 3/1/97- OUT OF SERVICE, TEG 5/15/97)

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-340-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

84,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #2GF27 CANCELLED BY PERMITTEE 3/1/97- OUT OF SERVICE, TEG 5/15/97)

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-353-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

67,200 GALLONS FIXED ROOF STORAGE TANK TANNEHILL OIL 06/11/93, NEW # S-1245-55-0.

NOTE: TRANSFER OF OWNERSHIP TO

PERMIT UNIT REQUIREMENTS

1. See facility wide requirements for requirements applicable to this permit unit. [District Rule 2080]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-354-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

67,200 GALLONS WASH TANK

NOTE: TRANSFER OF OWNERSHIP TO

TANNEHILL OIL 06/11/93, NEW # S-1245-56-0.

PERMIT UNIT REQUIREMENTS

1. See facility wide requirements for requirements applicable to this permit unit. [District Rule 2080]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-362-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK 05GF18 *** SOLD TO OAKLAND DRILLING ***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-363-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK 05GF19 *** SOLD TO OAKLAND DRILLING ***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-366-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

126,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, WASH TANK

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-367-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #1GF66

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-368-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK #1GF65

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-369-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK, FUEL OIL TANK

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-370-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

49,999 GALLONS FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-371-0 **EXPIRATION DATE**: 02/28/2007

EQUIPMENT DECRIPTION:

99,999 GALLONS FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-372-0 **EXPIRATION DATE**: 02/28/2007

EQUIPMENT DECRIPTION:

19,999 GALLONS FIXED ROOF STORAGE TANK

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-373-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION: 99,999 GALLONS WASH TANK

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-375-4 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

25.2 MMBTU/HR GAS-FIRED STEAM GENERATOR (DIS# 27559-66; TX# 6783). (MULTIPLE L

CANCELED PER APPLICANT REQUEST LMS 10/4/94

(MULTIPLE LOCATIONS)

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% carbon dioxide). [District Rule 4301]
- 4. All combustion equipment equipment (burner, combustion air controls, etc.) shall be operated and maintained as intended by manufacturer. []
- All wells producing from strata steamed by this unit shall be connected to a District-approved emissions control system, have District-approved closed casing vents or be District-approved uncontrolled cyclic wells. [District Rule 4401]
- 6. This steam generator shall be fired exclusively on PUC-regulated natural gas or natural gas documented to be of comparable sulfur quality. []
- 7. This steam generator shall not operate in Sections 35 or 36, Township 31S, Range 22E when gas turbine engine S-2592-1 (formerly S-1129-65) is in operation. []
- 8. When gas firing, compliance source testing for fuel gas sulfur content shall be conducted annually (or as approved by the District) within 60 days prior to the permit anniversary. [District Rule 1070]
- 9. The sample collection shall be conducted under conditions (fuel quality, firing rate, waste gas incineration, air fuel ratio, etc.) expected to result in emissions representative of normal operation. []
- 10. The operational conditions during compliance testing may be imposed as permit requirements. []
- 11. Should source testing indicate an emission factor higher than that approved, the operator shall comply with Rule 1100 and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District NSR Rule]
- 12. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District NSR Rule]
- 13. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule]
- 14. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District NSR Rule]
- 15. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District NSR Rule]
- 16. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District NSR Rule]
- 17. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District NSR Rule]
- 18. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District NSR Rule]
- 19. Sufficient reference gas shall be available for continuous calibration of oxygen analyzer. []
- 20. For the SLC, overall throttle and use factor for each unit shall be no greater than 64%. []
- 21. Maximum gas-fired emission rates shall not exceed PM10: 0.0100 lb/MMBtu; SOx (as SO2): 0.0008 lb/MMBtu; SOx (as SO4): 0.0004 lb/MMBtu; NOx (as NO2): 0.1079 lb/MMBtu; VOC: 0.0030 lb/MMBtu; and CO: 0.0350 lb/MMBtu. []

- 22. Total combined emissions for all units subject to SLC plan shall not exceed PM10: 1,448.23 lb/day; SOx (as SO2): 12,230.23 lb/day; SOx (as SO4): 504.57 lb/day; NOx (as NO2): 9,146.23 lb/day; VOC: 181.73 lb day; and CO: 1,073.16 lb/day. []
- 23. For units equipped with continuous emissions monitors (CEMs), CEM records shall be used in place of calculated emissions. [District NSR Rule]
- 24. If on any day CEM or fuel use determinations fail, Texaco EPI shall meet the requirements of Rule 1100 as specified for CEM's. []
- 25. For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas flowrates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-380-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

12 MMBTU/HR GAS-FIRED HEATER TREATER WITH THREE BURNERS EACH RATED AT 4 MMBTU/HR - STATION L

- 1. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081, and Kern County Rule 108.1], [Federally Enforceable Through Title V]
- 2. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. Firing on PUC or FERC quality natural gas shall demonstrate compliance with this requirement. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 5. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
- 6. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume until compliance with the sulfur limits can be demonstrated for 8 consecutive weeks for a fuel source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 7. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6, 6A, 6B, 6C or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 8. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 9. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 10. Excess combustion air shall be maintained at no less than 10% unless continuous operation oxygen analyzer/controller is utilized. [District Rule 2080], [Federally Enforceable Through Title V]
- 11. Heater treater shall be fired exclusively on natural gas or LPG and shall have no provisions for firing on fuel oil. [District Rules 2080 and 4301, 5.2.2], [Federally Enforceable Through Title V]
- 12. Permittee shall maintain records of fuel hhv, monthly fuel use, and cumulative annual fuel use for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-381-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

7.5 MMBTU/HR GAS-FIRED HEATER TREATER WITH THREE BURNERS EACH RATED AT 2.5 MMBTU/HR - STATION L

- 1. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081, and Kern County Rule 108.1], [Federally Enforceable Through Title V]
- 2. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 3. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. Firing on PUC or FERC quality natural gas shall demonstrate compliance with this requirement. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 5. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
- 6. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume until compliance with the sulfur limits can be demonstrated for 8 consecutive weeks for a fuel source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 7. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6, 6A, 6B, 6C or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 8. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 9. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 10. Excess combustion air shall be maintained at no less than 10% unless continuous operation oxygen analyzer/controller is utilized. [District Rule 2080], [Federally Enforceable Through Title V]
- 11. Heater treater shall be fired exclusively on natural gas or LPG and shall have no provisions for firing on fuel oil. [District Rules 2080 and 4301, 5.2.2], [Federally Enforceable Through Title V]
- 12. Permittee shall maintain records of fuel hhv, monthly fuel use, and cumulative annual fuel use for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 2520, 9.3.2 and 4305], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-382-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

7.5 MMBTU/HR GAS-FIRED HEATER TREATER WITH THREE BURNERS EACH RATED AT 2.5 MMBTU/HR - STATION L

- 1. Excess combustion air shall be maintained at no less than 10% unless continuous operation oxygen analyzer/controller is utilized. [District Rule 2080]
- 2. Heater treater shall be fired exclusively on natural gas or LPG and shall have no provisions for firing on fuel oil. [District Rule 2080]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-383-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

7.5 MMBTU/HR GAS-FIRED HEATER TREATER WITH THREE BURNERS EACH RATED AT 2.5 MMBTU/HR - STATION L

- 1. Excess combustion air shall be maintained at no less than 10% unless continuous operation oxygen analyzer/controller is utilized. [District Rule 2080]
- 2. Heater treater shall be fired exclusively on natural gas or LPG and shall have no provisions for firing on fuel oil. [District Rule 2080]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-385-9 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

THERMALLY ENHANCED OIL RECOVERY OPERATION WITH WELL VENT VAPOR COLLECTION PIPING NETWORK AND FLARE SERVING 40 OIL PRODUCTION WELLS (MCKITTRICK OILFIELD)

- 1. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5], [Federally Enforceable Through Title V]
- 2. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1], [Federally Enforceable Through Title V]
- 3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081 and Kern County Rule 108.1], [Federally Enforceable Through Title V]
- 4. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1.1], [Federally Enforceable Through Title V]
- 5. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 6. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. This requirement does not apply to cyclic wells located on contiguous and adjacent oil production properties with less than 10 cyclic wells owned by or under the control of a company. [District Rule 4401, 5.1 and 5.2], [Federally Enforceable Through Title V]
- 7. For cyclic wells located on properties with less than 10 cyclic wells and owned by a company, the uncontrolled VOC emissions from any well vent or system of well vents connected to a single vapor collection and control device shall be reduced by at least 50 percent.

 Properties shall include contiguous and adjacent oil production properties owned by or under control of the company. [District Rule 4401, 5.4], [Federally Enforceable Through Title V]
- 8. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1], [Federally Enforceable Through Title V]
- 9. Operator shall repair each leak within 15 calendar days of detection. The APCO may grant a 10 calendar day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 4401, 5.3.1], [Federally Enforceable Through Title V]
- 10. Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3 and 5.3.2], [Federally Enforceable Through Title V]
- 11. Annual control efficiency compliance tests shall be performed on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed by source testers certified by the California Air Resources Board (CARB) during June, July, August or September of each year if the system's control efficiency is dependent upon ambient air temperature. The APCO may waive the annual testing requirements of this condition if the vapor control system does not exhaust to atmosphere or if all uncondensed VOC emissions collected by a vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine or in a smokeless open flare, and the source's Operating Permit contains adequate periodic monitoring to ensure the source meets 99% control efficiency. [District Rule 4401, 5.1, 5.2 and 6.2.1], [Federally Enforceable Through Title V]
- 12. The control efficiency of the vapor collection and control system used to control VOC emissions from steam enhanced crude oil production well shall be determined by mass balance based on most stringent of a source test, USEPA approved emission factors, or Air Pollution (AP)-42 emission factors for components and number of components; and the efficiency of destruction devices determined by USEPA Method 25, 25a, or 25b as applicable. [District Rule 4401, 6.3.1], [Federally Enforceable Through Title V]
- 13. VOC content shall be determined using the latest revision of ASTM Method E168, E169, or E260 as applicable. Halogenated exempt compounds shall be determined by CARB Method 432. [District Rule 4401, 6.3.2], [Federally Enforceable Through Title V]

- 14. The source shall perform annual leak inspections on at least 20% of the system components. A different sample of system components shall be tested each year such that all system components are tested over a five year period. Testing shall be accomplished using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. [District Rules 2520, 9.3.2 and 4401, 6.3.3], [Federally Enforceable Through Title V]
- 15. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 16. Operation shall include condenser vessel, air-cooled heat exchanger, 500 barrel condensate vessel and 0.9 MM Btu/hr Sur-Lite Model 20 SLF 20 enclosed flare. [District NSR Rule], [Federally Enforceable Through Title V]
- 17. Permittee shall maintain with this permit a current listing of all steam enhanced wells connected to the casing collection system and shall make such listing readily available for District inspection upon request. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 18. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using District approved emission factors from API Publication 4322 Table M1. [District Rules 2520, 9.3.2 and NSR], [Federally Enforceable Through Title V]
- 19. All vapors from condenser shall be incinerated in flare. [District NSR Rule], [Federally Enforceable Through Title V]
- 20. Total number of leaks from the well vent vapor control system, including condensate handling, shall not exceed the number of leaks allowed by Rule 4401 (11/15/98) at any one time. [District Rule 4401], [Federally Enforceable Through Title V]
- 21. Emissions rate of VOC associated with the fugitive emissions from TEOR system including condensate collection and handling, and polish rod stuffing box fugitive emissions shall not exceed 18.3 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 22. Emissions rates shall not exceed any of the following: PM10: 0.3 lb/day, SOx (as SO2): 49.3 lb/day nor 2000 ppmv, NOx (as NO2): 1.5 lb/day or CO: 0.8 lb/day. [District Rules 4801 and NSR], [Federally Enforceable Through Title V]
- 23. Volume flow rate of TEOR gas incinerated at flare shall not exceed 34,400 cf/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 24. Volume flow rate of PUC regulated quality makeup gas incinerated at flare shall not exceed 12,000 cf/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 25. Flare shall be equipped with operational fuel meters as required to demonstrate compliance with PUC regulated quality makeup gas and TEOR gas consumption limits. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 26. Flare shall be equipped with an operational temperature sensor. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 27. Flame temperature of the flare shall be greater than 1200 degrees F or another temperature established during source testing which documents compliance with all emission limits. [District NSR Rule], [Federally Enforceable Through Title V]
- 28. Daily records of TEOR gas and makeup gas consumed by flare shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 29. Compliance with sulfur compound emission limits shall be demonstrated annually within 60 days of permit anniversary by TEOR gas sample analysis for sulfur content by an independent testing laboratory. [District Rule 1081], [Federally Enforceable Through Title V]
- 30. TEOR fuel gas sulfur content shall be determined by ASTM D3246 or by other District approved test method. [District Rule 1081], [Federally Enforceable Through Title V]
- 31. Source test results shall be submitted to the District within 30 days after collection. [District Rule 1081], [Federally Enforceable Through Title V]
- 32. If the flare is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 33. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume until compliance with the sulfur limits can be demonstrated for 8 consecutive weeks for a fuel source. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rules 4201 and 4801; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 35. Compliance with permit conditions in the Title V permit shall be deemed compliance with subsumed Kern County Rule 404. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-386-11 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

THERMALLY ENHANCED OIL RECOVERY OPERATION WITH WELL VENT VAPOR COLLECTION PIPING NETWORK SERVING 119 STEAM DRIVE WELLS AND 1 CYCLIC WELL (NORTH MIDWAY)

- 1. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5], [Federally Enforceable Through Title V]
- 2. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1], [Federally Enforceable Through Title V]
- 3. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081 and Kern County Rule 108.1], [Federally Enforceable Through Title V]
- 4. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1.1], [Federally Enforceable Through Title V]
- 5. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 6. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. This requirement does not apply to cyclic wells located on contiguous and adjacent oil production properties with less than 10 cyclic wells owned by or under the control of a company. [District Rule 4401, 5.1 and 5.2], [Federally Enforceable Through Title V]
- 7. For cyclic wells located on properties with less than 10 cyclic wells and owned by a company, the uncontrolled VOC emissions from any well vent or system of well vents connected to a single vapor collection and control device shall be reduced by at least 50 percent.

 Properties shall include contiguous and adjacent oil production properties owned by or under control of the company. [District Rule 4401, 5.4], [Federally Enforceable Through Title V]
- 8. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1], [Federally Enforceable Through Title V]
- 9. Operator shall repair each leak within 15 calendar days of detection. The APCO may grant a 10 calendar day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 4401, 5.3.1], [Federally Enforceable Through Title V]
- 10. Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3 and 5.3.2], [Federally Enforceable Through Title V]
- 11. Annual control efficiency compliance tests shall be performed on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed by source testers certified by the California Air Resources Board (CARB) during June, July, August or September of each year if the system's control efficiency is dependent upon ambient air temperature. The APCO may waive the annual testing requirements of this condition if the vapor control system does not exhaust to atmosphere or if all uncondensed VOC emissions collected by a vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine or in a smokeless open flare, and the source's Operating Permit contains adequate periodic monitoring to ensure the source meets 99% control efficiency. [District Rule 4401, 5.1, 5.2 and 6.2.1], [Federally Enforceable Through Title V]
- 12. The control efficiency of the vapor collection and control system used to control VOC emissions from steam enhanced crude oil production well shall be determined by mass balance based on most stringent of a source test, USEPA approved emission factors, or Air Pollution (AP)-42 emission factors for components and number of components; and the efficiency of destruction devices determined by USEPA Method 25, 25a, or 25b as applicable. [District Rule 4401, 6.3.1], [Federally Enforceable Through Title V]
- 13. VOC content shall be determined using the latest revision of ASTM Method E168, E169, or E260 as applicable. Halogenated exempt compounds shall be determined by CARB Method 432. [District Rule 4401, 6.3.2], [Federally Enforceable Through Title V]

- 14. The source shall perform annual leak inspections on at least 20% of the system components. A different sample of system components shall be tested each year such that all system components are tested over a five year period. Testing shall be accomplished using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. [District Rules 2520, 9.3.2 and 4401, 6.3.3], [Federally Enforceable Through Title V]
- 15. TEOR operation with well vent vapor control system including: gas/liquid separators, water-cooled heat exchangers, fin-fan cooling towers, 10 Hp Intervac liquid ring vacuum pumps with separators, liquid transfer pumps, casing gathering line, liquid traps and pumps, compressors, fin fan heat exchangers, 2-phase separators, and non-condensible gas line with liquid traps to existing incineration steam generators S-1129-16, -24 and -859 or DOGGR approved vapor disposal wells. [District NSR Rule], [Federally Enforceable Through Title V]
- 16. Operation shall include condensate piping to existing crude oil wash tank. [District NSR Rule], [Federally Enforceable Through Title V]
- 17. Total number of leaks form well vent vapor control system, including condensate handling, shall not exceed the number of allowable leaks required by rule Rule 4401 (1/15/98) at any one time. [District Rules 4401 and NSR], [Federally Enforceable Through Title V]
- 18. Gas/liquid separators and condensate drums/tanks and all other equipment used to handle or store condensate shall be enclosed and shall vent only to vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]
- 19. Water/VOC condensate from gas/liquid separators and condensate drums shall be pumped only to production manifold or to production facilities equipped with an operating vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]
- Condensate storage/production wash tank shall be operated at a constant fluid level. [District NSR Rule], [Federally Enforceable Through Title V]
- 21. Collected vapors shall disposed of in District approved incineration devices as listed on this permit or in Department of Oil, Gas and Geothermal Resources (DOGGR) approved vapor disposal wells. Permittee shall make copies of DOGGR approval for injection wells and make such documentation readily available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]
- 22. Permittee shall document Department of Oil & Gas Geothermal Resources approval for vapor disposal wells prior to injection of vapors. [District Rules 4401 and NSR], [Federally Enforceable Through Title V]
- 23. Permittee shall cease injection vapors & notify the District immediately if DOGGR injection approval is revoked, denied, terminated, surrendered or altered to disallow injection. [District NSR Rule], [Federally Enforceable Through Title V]
- 24. Permittee shall maintain with this permit a current listing of all steam enhanced wells connected to the casing collection system and shall make such listing readily available for District inspection upon request. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 25. The emissions rate of volatile organic compounds (VOCs) associated with the fugitive emissions from TEOR system operations, including condensate collection and handling and polish rod stuffing boxes, shall not exceed 54.4 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 26. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using District approved emission factors from API Publication 4322 Table M1. [District Rules 2520, 9.3.2 and NSR], [Federally Enforceable Through Title V]
- 27. An inspection and maintenance program consistent with that described in Rule 4403 sections 5.1 and 5.3 shall be implemented for stuffing boxes for all wells put into thermally enhanced production. [District NSR Rule], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-388-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

TRUCK CRUDE OIL LOADING FACILITY SERVING EXISTING 1500 BBL STORAGE/SHIPPING TANK. (MIDWAY SUNSET - SECURITY PROPERTY) ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-408-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

210,000 GALLON FIXED ROOF CRUDE OIL PRODUCTION TANK - SOLD TO ? PER 1997 BILL LMS 12/29/97

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-409-4 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

20 UNCONTROLLED CYCLICALLY STEAMED OIL PRODUCTION WELLS. (WESTERN HEAVY OIL SOURCE)

- 1. An increase in the number of wells listed shall require an Authority to Construct. [District Rule 2080], [Federally Enforceable Through Title V]
- 2. Uncontrolled cyclically steamed wells shall be located more than 1,000 ft from an existing well vent vapor control system. [District Rule 4401, 4.5.1], [Federally Enforceable Through Title V]
- 3. Wells no longer included under this Permit to Operate shall either be connected to a District-authorized well vent vapor control system or shall be shut in. [District Rule 4401, 4.7.3], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-527-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

27.5 MMBTU/HR GAS-FIRED STEAM GENERATOR (HSG #106) CANCELED PER APPLICANT REQUEST LMS 10/4/94

(WESTERN HEAVY OIL SOURCE)

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% carbon dioxide). [District Rule 4301]
- 4. All combustion equipment equipment (burner, combustion air controls, etc.) shall be operated and maintained as intended by manufacturer. []
- All wells producing from strata steamed by this unit shall be connected to a District-approved emissions control system, have District-approved closed casing vents or be District-approved uncontrolled cyclic wells. [District Rule 4401]
- 6. This steam generator shall be fired exclusively on PUC-regulated natural gas or natural gas documented to be of comparable sulfur quality. []
- 7. When gas firing, compliance source testing for fuel gas sulfur content shall be conducted annually (or as approved by the District) within 60 days prior to the permit anniversary. [District Rule 1070]
- 8. The sample collection shall be conducted under conditions (fuel quality, firing rate, waste gas incineration, air fuel ratio, etc.) expected to result in emissions representative of normal operation. []
- 9. The operational conditions during compliance testing may be imposed as permit requirements. []
- 10. Should source testing indicate an emission factor higher than that approved, the operator shall comply with Rule 1100 and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District NSR Rule]
- 11. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District NSR Rule]
- 12. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule]
- 13. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District NSR Rule]
- 14. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District NSR Rule]
- 15. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District NSR Rule]
- 16. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District NSR Rule]
- 17. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District NSR Rule]
- 18. Sufficient reference gas shall be available for continuous calibration of oxygen analyzer. []
- 19. For the SLC, overall throttle and use factor for each unit shall be no greater than 64%. []
- 20. Maximum gas-fired emission rates shall not exceed PM10: 0.0100 lb/MMBtu; SOx (as SO2): 0.0007 lb/MMBtu; SOx (as SO4): 0.0004 lb/MMBtu; NOx (as NO2): 0.1080 lb/MMBtu; VOC: 0.0030 lb/MMBtu; and CO: 0.0350 lb/MMBtu. []
- 21. Total combined emissions for all units subject to SLC plan shall not exceed PM10: 1,448.23 lb/day; SOx (as SO2): 12,230.23 lb/day; SOx (as SO4): 504.57 lb/day; NOx (as NO2): 9,146.23 lb/day; VOC: 181.73 lb day; and CO: 1,073.16 lb/day. []

- 22. For units equipped with continuous emissions monitors (CEMs), CEM records shall be used in place of calculated emissions. [District NSR Rule]
- 23. If on any day CEM or fuel use determinations fail, Texaco EPI shall meet the requirements of Rule 1100 as specified for CEM's. []
- 24. For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas flowrates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-633-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

THERMALLY ENHANCED OIL RECOVERY OPERATION SERVING 73 WELLS. (WESTERN HEAVY OIL SOURCE)
RELINQUISHED PER 2/28/95 LETTER MPE

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]
- 4. Total uncontrolled VOC emissions from all well vents shall be reduced by at least 99%. [District Rule 4401]
- 5. All components of well vent vapor collection and control systems shall be maintained in good working condition. [District Rule 4401]
- 6. Leaks shall be inspected and repaired as specified in Rule 4401. [District Rule 4401]
- 7. Permittee shall comply with all applicable requirements of Rule 4401. []
- 8. Permittee shall maintain with this permit a current listing of all steam enhanced wells connected to the casing collection system and shall make such listing readily available for District inspection upon request. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-645-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

THERMALLY ENHANCED OIL RECOVERY OPERATION SERVING 114 WELLS. (WESTERN HEAVY OIL SOURCE)
RELINQUISHED PER 2/28/95 LETTER MPE

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]
- 4. Total uncontrolled VOC emissions from all well vents shall be reduced by at least 99%. [District Rule 4401]
- 5. All components of well vent vapor collection and control systems shall be maintained in good working condition. [District Rule 4401]
- 6. Leaks shall be inspected and repaired as specified in Rule 4401. [District Rule 4401]
- 7. Permittee shall comply with all applicable requirements of Rule 4401. []
- 8. Permittee shall maintain with this permit a current listing of all steam enhanced wells connected to the casing collection system and shall make such listing readily available for District inspection upon request. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-692-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

140 BHP DETROIT-ALLISON MODEL 50437001 DIESEL FIRED I. C. ENGINE

- 1. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes.

 Compliance shall be demonstrated by firing on PUC or FERC quality natural gas, or by source testing in combination with fuel analysis. [Kern County Rule 407], [Federally Enforceable Through Title V]
- 2. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration at the point of discharge. [District Rule 4201; Kern County Rule 404], [Federally Enforceable Through Title V]
- 3. Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [Kern County Rule 407], [Federally Enforceable Through Title V]
- 4. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 5. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 6. On all units which are not emergency or backup IC engines operating less than 200 hours per year, operator shall perform a source test for particulate emissions within 6 months of the initial Title V permit issuance. A source test for particulate emissions conducted within the 24 months prior to permit issuance shall be considered compliance with this testing requirement. Source testing for particulate matter shall be performed according to EPA Method 5, stack gas velocity by EPA Method 2, and the stack gas moisture content by EPA Method 4. If the initial PM test result is less than or equal to 0.06 grain/dscf, then testing shall occur not less than once every 5 years. Otherwise testing shall occur not less than once every 24 months. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 7. Test results from an engine that represents a group of engines in terms of rated brake horsepower, engine make and series, operational conditions, fuel used, and control method, shall satisfy testing requirements provided this group of engines is owned and operated by a single owner/operator. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 8. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 9. The operating hours of the I.C. engine shall not exceed 1,000 hours during any one calendar year. [District Rule 4701], [Federally Enforceable Through Title V]
- 10. A daily log of the engine operating hours including all operational use and operation for maintenance and testing purposes shall be kept on the premises at all times. [District Rules 4701 and NSR], [Federally Enforceable Through Title V]
- 11. Engine shall be equipped with an operational, non-resettable, totalizing hour meter. [District Rules 2520, 9.3.2 and 4701], [Federally Enforceable Through Title V]
- 12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rules 4201 and 4801; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 13. Compliance with permit conditions in the Title V permit shall be deemed compliance with subsumed Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-693-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

140 BHP DETROIT-ALLISON MODEL 50437001 DIESEL FIRED I. C. ENGINE

- 1. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes.

 Compliance shall be demonstrated by firing on PUC or FERC quality natural gas, or by source testing in combination with fuel analysis. [Kern County Rule 407], [Federally Enforceable Through Title V]
- 2. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration at the point of discharge. [District Rule 4201; Kern County Rule 404], [Federally Enforceable Through Title V]
- 3. Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [Kern County Rule 407], [Federally Enforceable Through Title V]
- 4. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 5. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 6. On all units which are not emergency or backup IC engines operating less than 200 hours per year, operator shall perform a source test for particulate emissions within 6 months of the initial Title V permit issuance. A source test for particulate emissions conducted within the 24 months prior to permit issuance shall be considered compliance with this testing requirement. Source testing for particulate matter shall be performed according to EPA Method 5, stack gas velocity by EPA Method 2, and the stack gas moisture content by EPA Method 4. If the initial PM test result is less than or equal to 0.06 grain/dscf, then testing shall occur not less than once every 5 years. Otherwise testing shall occur not less than once every 24 months. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 7. Test results from an engine that represents a group of engines in terms of rated brake horsepower, engine make and series, operational conditions, fuel used, and control method, shall satisfy testing requirements provided this group of engines is owned and operated by a single owner/operator. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 8. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 9. The operating hours of the I.C. engine shall not exceed 1,000 hours during any one calendar year. [District Rule 4701], [Federally Enforceable Through Title V]
- 10. A daily log of the engine operating hours including all operational use and operation for maintenance and testing purposes shall be kept on the premises at all times. [District Rules 4701 and NSR], [Federally Enforceable Through Title V]
- 11. Engine shall be equipped with an operational, non-resettable, totalizing hour meter. [District Rules 2520, 9.3.2 and 4701], [Federally Enforceable Through Title V]
- 12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rules 4201 and 4801; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 13. Compliance with permit conditions in the Title V permit shall be deemed compliance with subsumed Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-694-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

140 BHP DETROIT-ALLISON MODEL 50437001 DIESEL FIRED I. C. ENGINE

- 1. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes.

 Compliance shall be demonstrated by firing on PUC or FERC quality natural gas, or by source testing in combination with fuel analysis. [Kern County Rule 407], [Federally Enforceable Through Title V]
- 2. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration at the point of discharge. [District Rule 4201; Kern County Rule 404], [Federally Enforceable Through Title V]
- 3. Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [Kern County Rule 407], [Federally Enforceable Through Title V]
- 4. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 5. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 6. On all units which are not emergency or backup IC engines operating less than 200 hours per year, operator shall perform a source test for particulate emissions within 6 months of the initial Title V permit issuance. A source test for particulate emissions conducted within the 24 months prior to permit issuance shall be considered compliance with this testing requirement. Source testing for particulate matter shall be performed according to EPA Method 5, stack gas velocity by EPA Method 2, and the stack gas moisture content by EPA Method 4. If the initial PM test result is less than or equal to 0.06 grain/dscf, then testing shall occur not less than once every 5 years. Otherwise testing shall occur not less than once every 24 months. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 7. Test results from an engine that represents a group of engines in terms of rated brake horsepower, engine make and series, operational conditions, fuel used, and control method, shall satisfy testing requirements provided this group of engines is owned and operated by a single owner/operator. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 8. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 9. The operating hours of the I.C. engine shall not exceed 1,000 hours during any one calendar year. [District Rule 4701], [Federally Enforceable Through Title V]
- 10. A daily log of the engine operating hours including all operational use and operation for maintenance and testing purposes shall be kept on the premises at all times. [District Rules 4701 and NSR], [Federally Enforceable Through Title V]
- 11. Engine shall be equipped with an operational, non-resettable, totalizing hour meter. [District Rules 2520, 9.3.2 and 4701], [Federally Enforceable Through Title V]
- 12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rules 4201 and 4801; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 13. Compliance with permit conditions in the Title V permit shall be deemed compliance with subsumed Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-698-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

140 BHP DETROIT-ALLISON MODEL 50437001 DIESEL FIRED I. C. ENGINE

- 1. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes.

 Compliance shall be demonstrated by firing on PUC or FERC quality natural gas, or by source testing in combination with fuel analysis. [Kern County Rule 407], [Federally Enforceable Through Title V]
- 2. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration at the point of discharge. [District Rule 4201; Kern County Rule 404], [Federally Enforceable Through Title V]
- 3. Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [Kern County Rule 407], [Federally Enforceable Through Title V]
- 4. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 5. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 6. On all units which are not emergency or backup IC engines operating less than 200 hours per year, operator shall perform a source test for particulate emissions within 6 months of the initial Title V permit issuance. A source test for particulate emissions conducted within the 24 months prior to permit issuance shall be considered compliance with this testing requirement. Source testing for particulate matter shall be performed according to EPA Method 5, stack gas velocity by EPA Method 2, and the stack gas moisture content by EPA Method 4. If the initial PM test result is less than or equal to 0.06 grain/dscf, then testing shall occur not less than once every 5 years. Otherwise testing shall occur not less than once every 24 months. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 7. Test results from an engine that represents a group of engines in terms of rated brake horsepower, engine make and series, operational conditions, fuel used, and control method, shall satisfy testing requirements provided this group of engines is owned and operated by a single owner/operator. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 8. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 9. The operating hours of the I.C. engine shall not exceed 1,000 hours during any one calendar year. [District Rule 4701], [Federally Enforceable Through Title V]
- 10. A daily log of the engine operating hours including all operational use and operation for maintenance and testing purposes shall be kept on the premises at all times. [District Rules 4701 and NSR], [Federally Enforceable Through Title V]
- 11. Engine shall be equipped with an operational, non-resettable, totalizing hour meter. [District Rules 2520, 9.3.2 and 4701], [Federally Enforceable Through Title V]
- 12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rules 4201 and 4801; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 13. Compliance with permit conditions in the Title V permit shall be deemed compliance with subsumed Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-699-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

140 BHP DETROIT-ALLISON MODEL 50437001 DIESEL FIRED I. C. ENGINE

- 1. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes.

 Compliance shall be demonstrated by firing on PUC or FERC quality natural gas, or by source testing in combination with fuel analysis. [Kern County Rule 407], [Federally Enforceable Through Title V]
- 2. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration at the point of discharge. [District Rule 4201; Kern County Rule 404], [Federally Enforceable Through Title V]
- 3. Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [Kern County Rule 407], [Federally Enforceable Through Title V]
- 4. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 5. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 6. On all units which are not emergency or backup IC engines operating less than 200 hours per year, operator shall perform a source test for particulate emissions within 6 months of the initial Title V permit issuance. A source test for particulate emissions conducted within the 24 months prior to permit issuance shall be considered compliance with this testing requirement. Source testing for particulate matter shall be performed according to EPA Method 5, stack gas velocity by EPA Method 2, and the stack gas moisture content by EPA Method 4. If the initial PM test result is less than or equal to 0.06 grain/dscf, then testing shall occur not less than once every 5 years. Otherwise testing shall occur not less than once every 24 months. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 7. Test results from an engine that represents a group of engines in terms of rated brake horsepower, engine make and series, operational conditions, fuel used, and control method, shall satisfy testing requirements provided this group of engines is owned and operated by a single owner/operator. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 8. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 9. The operating hours of the I.C. engine shall not exceed 1,000 hours during any one calendar year. [District Rule 4701], [Federally Enforceable Through Title V]
- 10. A daily log of the engine operating hours including all operational use and operation for maintenance and testing purposes shall be kept on the premises at all times. [District Rules 4701 and NSR], [Federally Enforceable Through Title V]
- 11. Engine shall be equipped with an operational, non-resettable, totalizing hour meter. [District Rules 2520, 9.3.2 and 4701], [Federally Enforceable Through Title V]
- 12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rules 4201 and 4801; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 13. Compliance with permit conditions in the Title V permit shall be deemed compliance with subsumed Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-700-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

140 BHP DETROIT-ALLISON MODEL 50437001 DIESEL FIRED I. C. ENGINE

- 1. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes.

 Compliance shall be demonstrated by firing on PUC or FERC quality natural gas, or by source testing in combination with fuel analysis. [Kern County Rule 407], [Federally Enforceable Through Title V]
- 2. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration at the point of discharge. [District Rule 4201; Kern County Rule 404], [Federally Enforceable Through Title V]
- 3. Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [Kern County Rule 407], [Federally Enforceable Through Title V]
- 4. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 5. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 6. On all units which are not emergency or backup IC engines operating less than 200 hours per year, operator shall perform a source test for particulate emissions within 6 months of the initial Title V permit issuance. A source test for particulate emissions conducted within the 24 months prior to permit issuance shall be considered compliance with this testing requirement. Source testing for particulate matter shall be performed according to EPA Method 5, stack gas velocity by EPA Method 2, and the stack gas moisture content by EPA Method 4. If the initial PM test result is less than or equal to 0.06 grain/dscf, then testing shall occur not less than once every 5 years. Otherwise testing shall occur not less than once every 24 months. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 7. Test results from an engine that represents a group of engines in terms of rated brake horsepower, engine make and series, operational conditions, fuel used, and control method, shall satisfy testing requirements provided this group of engines is owned and operated by a single owner/operator. [District Rule 2520, 9.3.2], [Federally Enforceable Through Title V]
- 8. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 9. The operating hours of the I.C. engine shall not exceed 1,000 hours during any one calendar year. [District Rule 4701], [Federally Enforceable Through Title V]
- 10. A daily log of the engine operating hours including all operational use and operation for maintenance and testing purposes shall be kept on the premises at all times. [District Rules 4701 and NSR], [Federally Enforceable Through Title V]
- 11. Engine shall be equipped with an operational, non-resettable, totalizing hour meter. [District Rules 2520, 9.3.2 and 4701], [Federally Enforceable Through Title V]
- 12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rules 4201 and 4801; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 13. Compliance with permit conditions in the Title V permit shall be deemed compliance with subsumed Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-812-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

ONE 21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-813-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

ONE 21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-814-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

ONE 21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-815-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

ONE 42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK ***RELINQUISHED PER 2/28/95 LETTER MPE***

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-821-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WITH TWENTY-EIGHT (28) CLOSED-VENT STEAM DRIVE WELLS

- 1. Steam enhanced wells shall have closed casing vents. [District Rule 2201]
- 2. Crude oil produced from wells shall be routed via closed system to tanks S-1129-206, and '207. [District Rule 2201]
- 3. VOC emissions shall not exceed 61.6 lb/day. [District Rule 2201]
- 4. Permittee shall maintain with the permit a current listing of all steam enhanced wells included on this permit and shall make such listing readily available for District inspection upon request. [District Rule 4401]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-823-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF PETROLEUM SHIPPING TANK: TEMPORARY REPLACEMENT UNIT FOR S-1129-186-1. [PERMIT CANCELLED PER CONDITION 2, 9/18/98 GAH]

- 1. Throughput of stored liquids shall not exceed 350 barrels/day. []
- 2. This temporary replacement petroleum shipping tank shall be removed from site by March 22, 1996. []
- 3. The permittee shall keep accurate records of daily throughput and shall make such records available for District inspection upon request. []
- 4. Permit unit S-1129-186 shall not be utilized until it is permanently installed at this location. At that time, this unit shall be removed from site. []

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-824-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

500 BBL FIXED ROOF HEAVY CRUDE STOCK TANK

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-825-0 **EXPIRATION DATE**: 02/28/2007

EQUIPMENT DECRIPTION:

500 BARREL FIXED ROOF HEAVY CRUDE STOCK TANK

PERMIT UNIT REQUIREMENTS

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-827-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

21,000 GALLON (500 BBL) FIXED ROOF CONDENSATE SEPARATION AND STORAGE TANK WITH PRODUCTION SEPARATOR, FIN FAN HEAT EXCHANGER AND VAPOR RECOVERY SYSTEM SHARED WITH S-1129-830. (7 EAST FACILITY, MCKITTRICK FEE LEASE).

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- Vapor recovery system shall include liquid knockout, 15 hp gas compressor, and piping to 7 East flare S-1129-831 and steam generator S-1129-56. [District Rule 2201]
- 3. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule]
- 4. Tank roof appurtenances shall be maintained leak free (as defined in Rule 4623). [District Rule 2201]
- 5. Tank gauging, sampling devices, relief valves, manholes and etc. shall be equipped with gas-tight (as defined in Rule 4623) gaskets and shall remain closed at all times except during gauging or sampling. [District Rule 2201]
- 6. Tank seams, welds, joints, piping, valves and fittings shall be inspected and maintained gas-tight (as defined in Rule 4623). [District Rule 2201]
- 7. The tank shall be equipped with a vapor recovery system capable of reducing VOC emissions by at least 99%. [District Rule 2201]
- 8. VOC emissions shall not exceed 6.44 lb/day. [District Rule 2201]
- 9. Vapor recovery gas shall be routed to H2S scrubber included on S-1129-831 prior to incineration in 7 East flare S-1129-831 or steam generator S-1129-56. [District Rule 2201]
- 10. Vapor recovery gas volume shall not exceed 225,000 scf/day. [District Rule 2201]
- 11. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081]
- 12. District witnessed sample collection to demonstrate compliance with VOC emission limit shall be conducted within 60 days of initial start-up and on an annual basis thereafter. [District Rule 1081]
- 13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 14. Permittee shall maintain accurate records of vapor recovery gas flow rate and VOC content. [District Rule 1070]
- 15. All records shall be retained for a minimum of 2 years, and shall be made available for District inspection upon request. [District Rule 1070]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-829-1 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

MODIFY PREVIOUSLY APPROVED 21,000 GALLON (500 BBL) FIXED ROOF CONDENSATE SEPARATION AND STORAGE TANK WITH PRODUCTION SEPARATOR AND FIN FAN HEAT EXCHANGER (6 NORTH FACILITY, MCKITTRICK FEE LEASE): ADD VAPOR RECOVERY SYSTEM.

- 1. Vapor recovery system shall include liquid knockout, two 15 hp gas compressors, and gas piping to 6 North flare S-1129-832. [District Rule 2201]
- 2. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201]
- 3. Tank roof appurtenances shall be maintained leak free (as defined in Rule 4623). [District Rule 2201]
- 4. Tank gauging, sampling devices, relief valves, manholes and etc. shall be equipped with gas-tight (as defined in Rule 4623) gaskets and shall remain closed at all times except during gauging or sampling. [District Rule 2201]
- 5. Tank seams, welds, joints, piping, valves and fittings shall be inspected and maintained gas-tight (as defined in Rule 4623). [District Rule 2201]
- 6. The tank shall be equipped with a vapor recovery system capable of reducing VOC emissions by at least 99%. [District Rule 2201]
- 7. VOC emissions shall not exceed 3.54 lb/day. [District Rule 2201]
- 8. Vapor recovery gas shall be routed to H2S scrubber prior to incineration in 6 North flare S-1129-832. [District Rule 2201]
- 9. Vapor recovery gas volume shall not exceed 120,000 scf/day. [District Rule 2201]
- 10. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081]
- 11. District witnessed sample collection to demonstrate compliance with VOC emission limit shall be conducted within 60 days of initial start-up and on an annual basis thereafter. [District Rule 1081]
- 12. The results of each sample analysis shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 13. Permittee shall maintain accurate records of vapor recovery gas flow rate and VOC content. [District Rule 1070]
- 14. All records shall be retained for a minimum of 2 years, and shall be made available for District inspection upon request. [District Rule 1070]
- 15. Prior to operating under Authorities to Construct S-1192-827-1 and '829-1 permittee shall provide VOC offsets for: 2187 lbs 1st qtr, 2211 lbs 2nd qtr, 2235 lbs 3rd qtr, 2235 lbs 4th qtr, at distance ratio per table 1 Rule 2201 dated 6/15/95. [District Rule 2201]
- 16. This Authority to Construct (ATC) cancels and replaces ATC S-1129-829-0. [District Rule 2201]
- 17. This Authority to Construct shall be implemented concurrently with ATC S-1129-832-0. [District Rule 2201]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-830-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

4200 GALLON (100 BBL) GAUGE TANK WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1129-827. (7 EAST FACILITY, MCKITTRICK FEE LEASE)

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule]
- 3. Tank roof appurtenances shall be maintained leak free (as defined in Rule 4623). [District Rule 2201]
- 4. Tank gauging, sampling devices, relief valves, manholes and etc. shall be equipped with gas-tight (as defined in Rule 4623) gaskets and shall remain closed at all times except during gauging or sampling. [District Rule 2201]
- 5. Tank seams, welds, joints, piping, valves and fittings shall be inspected and maintained gas-tight (as defined in Rule 4623). [District Rule 2201]
- 6. The tank shall be equipped with a vapor recovery system capable of reducing VOC emissions by at least 99%. [District Rule 2201]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-831-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

83.3 MMBTU/HR FLARE SERVING 7 EAST PRODUCTION FACILITY, MCKITTRICK FEE LEASE.

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Flare shall include, propane pilot, automatic re-ignition provisions, and 5 ft diameter by 18 ft tall H2S scrubber vessel with mist scrubber. [District Rule 2201]
- 3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1/4 or 5% opacity. [District Rule 2201]
- 4. Vapor recovery gas and natural gas lines to flare shall be equipped with volumetric flowrate indicators. [District Rule 2201]
- Maximum volumes of gas incinerated in this flare shall not exceed the following: 7 East vapor recovery gas 225,000 scf/day, 7 West vapor recovery gas 150,000 scf/day, and natural gas 6,000 scf/day. [District Rule 2201]
- 6. Supplemental fuel shall be natural gas only. [District Rule 2201]
- 7. 7 West vapor recovery gas shall be combusted in flare only when steam generator S-1129-56 is not operating. [District Rule 2201]
- 8. H2S scrubber shall operate with a removal efficiency of at least 95% and H2S concentration of scrubbed vapor recovery gas shall not exceed 800 ppm. [District Rule 2201]
- 9. H2S concentration in vapor recovery gas before and after the scrubber shall be tested to determine H2S removal efficiency daily or at an alternate frequency approved in writing by the District. [District Rule 1081]
- 10. When H2S scrubber is being recharged, unscrubbed gas shall not vent to incineration device or to atmosphere. [District Rule 2201]
- 11. Emission rates shall not exceed any of the following in lb/MMBtu: PM10 0.014, NOx 0.14, VOC 0.003 or CO 0.035. [District Rule 2201]
- 12. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081]
- 13. District witnessed sample collection to demonstrate compliance with H2S removal efficiency shall be conducted within 60 days of initial start-up and on an annual basis thereafter. [District Rule 1081]
- 14. The results of each sample analysis shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 15. Permittee shall maintain accurate daily records of type and volume of gas flared (natural gas, 7E and 7W vapor recovery gas), H2S concentration, and scrubber removal efficiency. [District Rule 1070]
- 16. All records shall be retained for a minimum of 2 years, and shall be made available for District inspection upon request. [District Rule 1070]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-832-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

83.3 MMBTU/HR FLARE SERVING 6 NORTH FACILITY, MCKITTRICK FEE LEASE.

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Flare shall be equipped with propane pilot, automatic re-ignition provisions and 5 ft diameter by 18 ft tall H2S scrubber vessel with mist scrubber. [District Rule 2201]
- 3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1/4 or 5% opacity. [District Rule 2201]
- 4. Vapor recovery gas and natural gas lines to flare shall be equipped with volumetric flowrate indicator. [District Rule 2201]
- 5. Maximum volumes of gas incinerated in this flare shall not exceed the following: 6 North vapor recovery gas 120,000 scf/day and natural gas 3,500 scf/day. [District Rule 2201]
- 6. Supplemental fuel shall be natural gas only. [District Rule 2201]
- H2S scrubber shall operate with a removal efficiency of at least 95% and H2S concentration of scrubbed vapor recovery gas shall not exceed 800 ppm. [District Rule 2201]
- 8. H2S concentration in vapor recovery gas before and after the scrubber shall be tested to determine H2S removal efficiency daily or at an alternate frequency approved in writing by the District. [District Rule 1081]
- 9. When H2S scrubber is being recharged, unscrubbed gas shall not vent to incineration device or to atmosphere. [District Rule 2201]
- 10. Emission rates shall not exceed any of the following in lb/MMBtu: PM10 0.014, NOx 0.14, VOC 0.003 or CO 0.035. [District Rule 2201]
- 11. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081]
- 12. District witnessed sample collection to demonstrate compliance with H2S removal efficiency shall be conducted within 60 days of initial start-up and on an annual basis thereafter. [District Rule 1081]
- 13. The results of each sample analysis shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 14. Permittee shall maintain accurate daily records of type and volume of gas flared (natural gas and 6N vapor recovery gas), H2S concentration, and scrubber removal efficiency. [District Rule 1070]
- 15. All records shall be retained for a minimum of 2 years, and shall be made available for District inspection upon request. [District Rule 1070]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-856-0 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

62.5 MMBTU/HR NATURAL GAS/TEOR GAS FIRED STRUTHERS STEAM GENERATOR WITH NORTH AMERICAN BURNER, O2 ANALYZER/CONTROLLER, AND FGR (FUNCTIONALLY IDENTICAL REPLACEMENT UNIT FOR S-1141-390).

- 1. Exhaust stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods [District Rule 1081]
- 2. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess air shall be maintained at no less than 15%. [District Rule 2201]
- 3. Emission rates shall not exceed any of the following: PM10 2.11 lb/hr, SOx (as SO2) 0.068lb/MMBtu, NOx (as NO2) 0.036 lb/MMBTU, VOC 0.42 lb/hr or CO 45 ppmvd @ 3% O2. [District Rules 2201 & 4305]
- 4. Permittee shall keep a record of the daily volumes of well vent vapors incinerated in this unit, and shall make the preceding two years records available for District inspection upon request. [District Rule 1070]
- 5. Permittee shall measure and record, at least monthly, the sulfur content of the well vent vapors introduced into this unit, and shall make the preceding two years records available for District inspection upon request. [District Rule 1070]
- 6. The permittee shall monitor the performance of the flue gas recirculation (FGR) system by monitoring the FGR rate using oxygen sensors in the FGR duct and windbox. [District Rule 4305]
- 7. The acceptable minimum FGR rate shall be established by testing emissions from this unit or other representative units as approved by the District. The acceptable FGR rate shall be the minimum FGR rate with which compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar firing rate. [District Rule 4305]
- 8. The permittee shall record and maintain records of the O2 concentrations (% by volume), date and time the measurements were recorded, and the calculated FGR rate. The records shall also include a description of any corrective action taken to maintain the FGR rate above the minimum acceptable rate. These records shall be retained at the facility for a period of no less than two years and shall be made readily available for District inspection upon request. [District Rules 1070 and 4305]
- 9. If the FGR rate is less than the acceptable level, the permittee shall notify the District and take corrective action within one (1) hour after detection. If the FGR rate is not corrected promptly, the permittee shall conduct an emissions test within 60 days, utilizing District-approved test methods, to demonstrate compliance with the applicable emission limits at the lower FGR rate. [District Rule 4305]
- 10. The unit shall be able to monitor oxygen in the FGR duct and windbox. [District Rule 4305]
- 11. The FGR rate shall be determined at least on a weekly basis by measuring the stack O2% by volume (Os), and windbox O2% by volume (Ow) using the following equation: FGR rate = {(Ow 20.9)/(Os 20.9)} * 100%. [District Rule 4305]
- 12. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months, except as provided below. [District Rule 4305]
- 13. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 4305]
- 14. If permittee fails any compliance demonstration for NOx and CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 4305]
- 15. Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NOx and CO source testing requirement. [District Rule 4305]
- 16. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081]
- 17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081]
- 18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

19.	The following test methods shall be used: NOx (lb/MMBtu) - EPA Method 19, fuel sulfur ASTM 3246, Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rule 1081]	CO (ppmv) -	EPA Method 10 or ARB

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1129-859-2 **EXPIRATION DATE:** 02/28/2007

EQUIPMENT DECRIPTION:

DORMANT 25.2 MMBTU/HR OIL-FIRED NATIONAL STEAM GENERATOR (HSG #13; DIS# 20758-66) WITH NORTH AMERICAN BURNER

- 1 This permit unit shall not be operated unless the owner or operator applies to modify the Title V permit to address the requirements of District Rule 2520, section 9.0 for this permit unit. [District Rule 2520, 9.0], [Federally Enforceable Through Title V]
- 2. This equipment shall not be operated for any reason until necessary retrofits are made to comply with the applicable requirements of District Rule 4305. [District Rules 2520, 9.3.2 and 4305, 7.4], [Federally Enforceable Through Title V]
- 3. No modification(s) to this unit shall be performed without an Authority to Construct for the modification(s), except for changes specified in condition 4 below. [District Rule 2080], [Federally Enforceable Through Title V]
- 4. The fuel supply line shall be physically disconnected from this unit. [District Rule 2080], [Federally Enforceable Through Title V]
- 5. Emission rates shall not exceed any of the following PM10: 0.114 lb/MMBtu; SOx (as SO2): 0.036 lb/MMBtu, NOx (as NO2): 0.052 lb/MMBtu, VOC: 0.007 lb/MMBtu, or CO: 45 ppmv @ 3% O2. [District Rule 2201]
- 6. Emissions assessed to the SLC for this unit are PM10: 43.9 lb/day, SOx (as SO2): 13.9 lb/day, NOx (as NO2): 20.1 lb/day, VOC: 2.6 lb/day, and CO: 12.9 lb/day [District Rule 2201]
- 7. Emission rates from all permit units in the Western Heavy Oil Source SLC Compliance Plan shall not exceed PM10: 289.5 lb/day, SOx (as SO2): 3,326.5 lb/day; NOx (as NO2): 302.0 lb/day, VOC: 33.8 lb/day, and CO: 175.9 lb/day. [District Rule 2201]
- 8. Should source testing indicate an emission factor higher than that approved, the operator shall comply with Rule 1100 and, if necessary, submit an application for Authority to Construct to incorporate the higher emission factor into the SLC. [District Rule 2201]
- 9. The permittee shall maintain records of fuel type, quantity, permitted emission factors and emissions for each unit for each day of operation, in the format approved by the District. [District Rule 2201]
- 10. Records required by this permit shall be retained on site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201]
- 11. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District quarterly, if no SLC violations occurred in the previous six months. [District Rule 2201]
- 12. Total daily emissions of each air contaminant, and total daily fuel used, for each unit subject to the SLC and for each day of the month, shall be submitted to the District monthly, if SLC violations occurred in the previous six months. [District Rule 2201]
- 13. Reports of daily emissions and fuel usage, as required by this permit for units in the SLC, shall be submitted within 30 days after the end of the reporting period. [District Rule 2201]
- 14. For any day monitoring provisions fail, the emissions shall be calculated on operational data (steam production rate, inlet air and exhaust gas flow rates, etc) or, if such data is not available, for the four days of operation preceding the breakdown. [District Rule 2201]
- 15. The operator shall apply to revise each Permit to Operate subject to the SLC when any unit subject to the SLC has a District-authorized change in daily emission rate, or Permit to Operate is surrendered or sold. [District Rule 2201]
- 16. This permit unit shall comply with NOx and sulfur compound emission requirements as specified in Rules 4405 and 4406. [Rules 4405 and 4406]
- 17. Fuel gas/vapor recovery gas sample collection and analysis, and mass balance calculations to demonstrate compliance with SOx emission limit shall be conducted annually. [District Rule 1081]
- 18. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months, except as provided below. [District Rule 4305]
- 19. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 4305]

- 20. If permittee fails any compliance demonstration for NOx and CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 4305]
- 21. Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NOx and CO source testing requirement. [District Rule 4305]
- 22. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 23. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans, and fuel oil sulfur content ASTM D4294. [District Rules 1081 and 4305]
- 24. Formerly S-1141-393-1 and S-1129-9. []